Proceedings of The 5th Uzbekistan - Indonesia International Joint Conference on

Globalization, Economic Development, and Nation Character Building

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Globalization, Economic Development, and Nation Character Building

Margianti, Abdurakhmanov, Hotniar, Toto Sugiarto (Eds.)

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The 5th Uzbekistan-Indonesia International Joint Conference on
Globalization, Economic Development, and Nation Character Building
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Abstract

As the fourth most populated country in the world, Indonesia should plays significant role in globalization. Since the economic crisis started in 1997, the President of the Republic of Indonesia, Susilo Bambang Yudhoyono outlined economic challenges and opportunities for Indonesia. They are significant source of finances to develop the economy for the next 15 years, supplying the ever-increasing need for electricity, the infrastructure sector, increasing purchasing power, and strong cooperation between businessmen and the government. Today, Uzbekistan has also entered into the new phase of economic reforms.

The major goals of these reforms are the provision of deep structural transformations in the economy and primarily, in such areas as strengthening national currency and liberalizing foreign trade. The program of radical denationalization and privatization of enterprises is aimed at priority development of private ownership and sharp reduction of the presence of state in the economy. Special attention is attached to accelerated growth of SME, private entrepreneurship, increasing its role in the structure of the economy, development of banking and finance sectors (Karimov, 2011).

Globalization, which is defined as a multidimensional phenomenon, does not only touch political, economic, social and cultural spheres of any society but also reshapes the traditional way of studying the social world and human nature (Robinson, 2005). Globalization has been here coloring our daily life. Its potential impacts-through increasing social, cultural, economic and political interconnectedness arising from the phenomenon-on nation economic, social, cultural, political, and character development, needs special attentions.

In the beginning, globalization is expected to increase the welfare of the world as a whole. However, by time it was found that expected welfare increase was not realized for the poor people and less developed countries. It, furthermore, increased the inequality of incomes distribution on the world population (Alkapler, 2008). On the other hand, globalization is assumed to break down borders in markets, political structures and as well as in cultural interaction, resulting in global interdependence and a diminishing of local control. These resulted in the ability of capital and services to act freely globally, the political basis remains local. Those countries which have the ability to cope with this “new era” by moving from local capitalism to being a host for multinational capital – attracting foreign direct investment into a country with liberalized markets and reformed financial and legal structures, characterized by good governance, globalization provides a space for strong economic growth (van Zyl, 2001).

We understand that globalization is a prismatic phenomenon. It is a complex phenomenon, which encompasses a great variety of tendencies and trends in the economic, social and cultural spheres. Accordingly, it should be looked at in all its manifestations and from various angles. Indonesia and Uzbekistan economy and management would be interesting to review and discuss.

Initiated by the cooperation between Universitas Gunadarma in Jakarta Indonesia and Branch of Russian Economic University after G.V. Plekhanov in Tashkent, Uzbekistan, the first joint international conference is organized in Jakarta in 2011. The conference is annual event which is organized by the two universities alternately in Jakarta Indonesia and Tashkent Uzbekistan. Following the success of two sequences Uzbek-Indonesian Joint International Conferences, we are delighted to announce the third Uzbek-Indonesian Joint International on Economics and Management toward Nation Character Development.

AIM

This conference is aimed at creating an academic-government-business/industry-community forum with the following objectives:

- to promote research relevant to issues relating to globalization and its associated aspects such as economic, social, politics, and culture; participants will be provided with the opportunity to display and present their work.
- to foster the exchange of information, ideas and experiences acquired in the execution of projects, from successful initiatives and good practice;
- to encourage integration and exchange of knowledge among academics and professionals worldwide in micro and small business management, micro-finance, tourism industry, cooperative management, rural bank management, Islamic economic system, and business information management; and
- to discuss methodological approaches and projects which aim to integrate the topic of sustainable development in the curriculum of universities;
- to develop frameworks for a better understanding of the roles of ICT-supported micro and small businesses, micro-finance, tourism, community development, and Islamic economic systems in economic and nation character development.
- to network the participants and provide a platform so they can explore possibilities for cooperation.

Last but not least, a further aim of the event will be to document and disseminate in an Edited Proceeding.

Structure of the event

Conference Activities

During this conference, various activities are organized for participants. These activities include the followings.

- **Invited sessions**, participants may join into the plenary hall. The keynote speakers as well as various invited speakers will deliver the speech during this session. The different background of speakers is expected to enrich the knowledge of participants.
- **Parallel sessions,** to accommodate the number of papers, we provide two parallel sessions. In these sessions, participants can present their papers. Participants can choose the sessions that they are interested into.
- **Doctoral colloquium as well as poster presentation**. To accommodate the PhD students as well as Master students for enhancing their research, we provide them for presenting their works or progress as poster presentation. This Doctoral Consortium seeks to help doctoral students in the middle of later part of their doctoral studies (i.e., after their first year of the program) to develop an effective career plan based on their personal and professional goals. The intent is for students to apply the panel topic to their personal and professional goals, with input from faculty mentors and peers.
- **Workshops.** The workshops are organized by Universitas Gunadarma. These workshops provide the knowledge and experience from the fields. From corporate or practitioner as well as government officers.

The organizer also prepares some cultural activities around Bali and other parts of Indonesia.

Conference Scope

The fifth Uzbekistan-Indonesia International Joint Conference on Globalization, Economic Development, and Nation Character Building is one of the leading forums for the presentation of new advances and research results in the fields of both theoretical, experimental, or applied point of views. The conference will bring together leading researchers, engineers, and scientists in the domain of interest from around the world, as well as the people from business and or industry, government, and community.

The Scientific Track offers a platform for academics and researchers to present and debate state-of- the-art of research in the field, their contributions to local and regional development and their role for promoting the economic development and nation character building to meet the global change.

We invite papers and posters of researchers from disciplines. The Scientific Track is open to researchers from different disciplines, giving the opportunity to create interdisciplinary networks and cooperation. It serves as an interdisciplinary platform to stimulate visions and research ideas in focusing on the link between local and regional development.

Topics of interest for submission include, but are not limited to:

- Management and Decision Sciences, Economic Policy Development, Development Planning and Policy, Public Economics and Finance, Public Responsibility and Ethics, Regulatory Economics, Labor Economics, Welfare Economics, Financial Economics , Natural resources management, Economics development, Human Resource Development.
- The World Economy, Global Business, International Initiatives and Cooperation, International Relations & Collaborations, International Economics, International Finance, Education Management.
- Sustainable Development, Sustainable Economic Development, Sustainable Human and Social Development, and Socio-cultural Development.
- Corporate Finance and Governance, Business Performance Management, Change Management, Organizational Behavior & Theory, Organizational Communication, Communications Management, Strategic Management Policy, Stress Management , Systems Management, Time Management.
- Production and Organizations, Production and or Operations Management, Supply Change Management, Industrial and Manufacturing Engineering, Labor Relations & Human Resource Management, Total Quality Management, Marketing Research and Strategy, Consumer Behavior.
- Language & Literary on Nation Development, Language & Literary on Globalization, Travel, Tourism Management, and Transportation Industry
- Health and Human Services.
- Micro and Small Businesses Management, Small Business Entrepreneurship, Community Development, Microfinance, Cooperatives Management, Credit Union Management, Rural Bank Management, Small and Medium Business. \
- Comparative Economic Systems, Islamic Economic Systems, Islamic Banking, Islamic Insurance, Islamic Finance.
- Technological Change, Research and Development, Innovation, Technology & Society, Technology & Innovation in Business, Technology & Education, Technology, Society, Environmental Studies, Media and Communication Technology.
- Good Corporate Governance, Digital Government Application Domains, Open Government (o-government), Information Technology and Tools to Support Government, Cloud Computing for Government Domains, Geographic Information Systems, National and International Infrastructures for Information and Communication, Software Engineering for Government Projects.
- Management Information Systems, Accounting Information Systems, Business Information Systems, Business Intelligence, Collaboration Tools, Digital libraries and Knowledge Management.
- Human-Computer Interaction, Information Integration, Interoperable Data, Networks and Architectures, Large Scale Data and Information Acquisition and Management.
- Virtual Communities and Communications, Social and Organizational Networks, Social Computing and Networking, Social Network Analysis, Social Systems Dynamics, Social-Psychological, Social, Organizational, and Technological Systems, Socio - Cognitive - Technological Systems, Sociology and Social Computation.

Time and Venue

Date	:	29th – 30th of October 2015
Venue	:	Bali Dynasty Resort Jl. Kartika, Po Box 2047 South Kuta, Kuta, Indonesia, 80361

Profile of participants

All persons or groups who are working with topics mentioned above are invited to join the Third Uzbekistan-Indonesia Joint International Conference on Economic and Nation Character Development to Meet the Global Economic Challenges. The number of participants is expected around 120 persons and coming from cross-sectoral range of areas such as academic, researcher, students, professional, industrial practitioners, government officers and non government officers as well as observers from more than 5 countries.

It is believed that this wide range of participants will help to outline the need for integrated approaches towards the topic, hence to contribute to the further dissemination of the results.

Paper submission

Scholars wishing to deliver a presentation at the conference are kindly asked to submit an extended abstract of their paper in advance. We invite both theoretical and empirical, that focuses on the research questions outlined above.

The extended abstract should be written in English and should point out the general interest of the paper to be presented touching the above named issues. An extended abstract should describe the rationale and aims of the paper, and some of its results. General descriptions of broad contexts should be avoided. Abstracts should be written in the third person and not in the first or second one (e.g. I, me, or my paper). Please see the web site for the sample.

The abstract should include the following details:

- title of the presentation;
- name of the authors, organization, email-address, mailing-address, phone number;
- keywords;
- body text (max. 2000 words);
- and an approximately 80-word biography on the scientific/educational background of the author(s).

Ph.D scholars and junior researchers are especially encouraged to submit their proposals. Work in progress research of the Ph.D scholars will also be considered provided that their work falls under the themes outlined above. Relevance of papers, quality of objectives/research questions and robust methodology would be the critical parameters for including the papers in the conference. The abstracts will be evaluated and assessed for acceptance (access review).

The author of accepted abstract will receive further details about how to submit their full papers. The decision as to which papers will be accepted for presentation will be taken by the Chairman, on consultation with the organizing committee. The Chairman's decision is however the final one. Paper accepted on presentation will be published on conference proceeding.

Welcome

Dear guests, participants, speakers and organizers

A conference is a good starting point to establish a conducive atmosphere for people to meet formally and informally to share and to learn each other. Therefore, first of all, on behalf of Gunadarma University and the entire Committee, I am pleased to invite and wish you a warm welcome to the **5th Uzbekistan-Indonesia International Joint Conference on Globalization, Economic Development, and Nation Character Building, and International Conference and International Conference on Economics and Insurance**.

It is the culmination of the vision and dedication of the cooperation of Universitas Gunadarma in Jakarta, Indonesia and Branch of Russian Economic University after G.V. Plekhanov in Tashkent, Uzbekistan since 2010. The first joint international conference is organized in Jakarta in 2011, and after that it is held alternately in Jakarta Indonesia and Tashkent Uzbekistan. In this year, this Joint Conference is also held jointly with the International Conference on Economics and Insurance is a collaboration work between Univeristas Gunadarma and Asosiasi Ahli Manajemen Asuransi Indonesia (AAMAI) [the Indonesian Insurance Institute].

This conference addresses broad spectrum of topics of economic and management as well as community development as well as the utilizing of ICT in those areas. It also shows how researchers and practitioners investigating local approaches and needs. I believe that it makes significant contributions to the development of knowledge in this interested areas. The topics are delivered by distinguished colleagues spanning academic and industry center from various disciplines presenting various research results that which is not only theoretical but also have practical impact to the public.

Through this cooperation and event, we hope that we could share findings, ideas, views and vision. The organizer expects that the conference will offer a stimulating and professionally rewarding time for all, maximizing the benefit of mutual sharing of ideas with fellow attendees and departing with new friends and new point of view.

This great event happens for works of several parties and people. So, I would like to take this opportunity to thank all of the people who made this first conference the success that it was. First, let me give special thank to Branch of Russian Economic University after G.V. Plekhanov in Tashkent, Uzbekistan in their trust to Universitas Gunadarma in building cooperation for mutual benefit. Secondly, I would like also to thank the Ambassador of Republic of Indonesia in Tashkent - Uzbekistan, His Excellency Anak Agung Gde Alit Shantika, and the Ambassador of Uzbekistan Republic in Jakarta - Indonesia, His Excellency Shavkat Jamalov for their supports for this conference.

I also like to express all invited speakers. Their contributions to this conference are very valuable. Allow me also to express gratitude to organizing team including scientific committee from various countries, program chairs, session chairs, and others, for their commitment, eœort and dedication in undertaking their own task to bring the success of this conference.

Finally, we owe our gratitude to all the conference participants for their contributions to the intellectual discourse during the conference and for the overall success of this conference. We thank all attendees in anticipation for contribution during the conference. The conference would not have been successful without the support and active contribution from all participants.

On behalf of Gunadarma University and all Organizing Committee, we thank and congratulate all those volunteers who have participated in creating and shaping the Conference into a valuable experience for each and every one of us,. Special thank, should be addressed to our partner for this event, AAMAI (the Indonesian Insurance Institute). As closing remarks, let's say thanks to the Lord Almighty God for all His blessing on us.

Prof.Dr. E.S. Margianti, M.M., S.E.
Rector of Universitas Gunadarma
Conference Chair

Organizer

The conference is organized by Universitas Gunadarma, Jakarta - Indonesia, in collaboration with Branch of Russian Economic University after G.V. Plekhanov in Tashkent, Uzbekistan. The organizing committee has experiences in organizing workshops and conferences at national as well as international level.

Scientific Committee

Conference Chair:
Prof. Dr. E.S. Margianti, SE, MM (Rector of Gunadarma University)

Conference Co-chair:
Prof. Kalandar Kh. Abdurakhmanov (Branch of Russian Economic University after GV Plekhanov in Tashkent)

Organizing Committee

Universitas Gunadarma
GV Plekhanov in Tashkent
Asosiasi Ahli Manajemen Asuransi Indonesia

International Partners

Rusian Economic University, GV Plekanov branch Tashkent
Tashkent Road Construction Institute (TARCI)
Tashkent Architectural Building Institute
The Slovak University of Agriculture in Nitra, Slovak Republic
Word Language
Oriental Institute of Language
Samarkand State Institute of Foreign Language
Ferghana Polytechnic Institute

Foreword

On behalf of scientists, teaching staff and students of Tashkent Branch of Russian Economic University after G. V. Plekhanov allow me to welcome all participants of our large-scale scientific forum - V International Joint Uzbek-Indonesian Conference on Globalization, Economic Development of Nation Character Building. Taking an opportunity, I would like to express my gratitude to Professor E. S. Margianti - Rector of Gunadarma University for the great contribution and vigorous activity directed on development of fruitful scientific dialogue of scientists of Uzbekistan and Indonesia.

We, scientists of Tashkent Branch consider participation in this event as a result of our joint scientific work within the whole year and present conference, the fifth one, has confirmed once again that our successful scientific cooperation is steadily strengthening and confidently moving on the way of the further development.

The fifth anniversary of our fruitful scientific dialogue between universities is marked more strengthening bilateral cooperation in the sphere of carrying out research works, exchange of teachers and research assistants for conducting scientific research and consultations, organization of joint conferences, seminars, symposiums, projects and programs representing mutual interest.

It is a great pleasure for us to receive representatives of Indonesia. Large-scale cultural forum "Uzbekistan-Indonesia" was organized and held at our university. A delegation of Gunadarma University headed by rector of the university by Professor E.S. Margianti visited Tashkent Branch many times.

Regular scientific exchange within the limits of the conferences, meetings with teachers and students of our university is reliable indicator of deepening and developing bilateral partnership between Uzbekistan and Indonesia in various areas, and in particular in educational sphere.

Diverse aspects of our cooperation are primary theme of negotiations of authority of the Branch and representatives of Embassy of Indonesia in Uzbekistan.

We take part in the conference work in Indonesia with great scientific interest as it is very important to work constantly over expansion of scientific outlook and expand intellectual borders for university. Plenipotentiary and Extraordinary Ambassador of Uzbekistan in Indonesia Shavkat Djamalov renders great assistance in strengthening bilateral cooperation.

Meetings of such level help undoubtedly to know more about the country, its culture and history and especially national economy. During the meetings within the limits of the conference specialists of the Branch learn a lot of new achievements in scientific and educational sphere of Indonesia, possibilities and perspective directions of cooperation for the next year, participate in incorporated seminars and symposiums.

During the visits to Indonesia we admire this country and its hospitable people each time. Gunadarma University and its scientific potential make a great impression and it is a great honor for us to be a partner of one of the largest and most famous universities of Indonesia. I would like to note that Russian Economic University after G. V. Plekhanov is a large centre of science, widely known for world scientific community, one of recognized leader in preparing highly qualified specialists.

A number of realized educational programs, taking into account a level of preparation and generation of standards are more than 90 including about 45 in baccalaureate, 30 specialists and 15 in master degree in REU after G. V. Plekhanov.

In 2015 Russian Economic University celebrated 108th anniversary. For its century-long activity more than 150 thousand specialists have graduated from the university who are successfully working not only in Russia, but also in the countries of near and far abroad.

I cannot help saying about activity of Tashkent Branch of REU after G. V. Plekhanov. This year we have celebrated 20th anniversary. During its activity the Branch prepared highly qualified specialists who achieved high results in the most different fields of activity.

It is happening thanks to stable integration of advanced pedagogical and information technologies, last achievements of science and higher education into educational process.

Graduates of the university take leading positions in policy and economy, business and science; they are bearers of nice university traditions not only in Uzbekistan but also abroad. We make all efforts that our students can succeed in study and further labor activity.

The university is constantly expanding borders of international cooperation. At present there made agreements on exchange of students and cooperation on programs of double and threefold diploma with universities of 17 countries of near and far abroad. A high educational level at our university is known far beyond Uzbekistan and Russia. For 20 years of its activity the Branch in Tashkent has firmly won a place in the market of educational services. Hundreds of applicants annually struggle for the right to study in our Branch.

In conclusion I would like to add that we scientists are always in constant search, we are simultaneously both pragmatists and predictors who deeply realize a special role of scientific anticipation in the conditions of high rates of information flow and renovation of knowledge. We are constantly searching new forms of scientific activity, we address to advanced experience of our foreign colleagues. We are always glad to share the achievements regarding the organizing and functioning new scientific directions and providing effective utilization of scientific potential.

And materials of this conference - documents and recommendations developed within the limits of its work will unconditionally become a strong basis for further consolidation of efforts of our universities with the purpose of development of higher education and perfect system of professional training on the basis of rich intellectual heritage and universal values, achievements of modern culture, economy and technologies.

Thank you for joining our conference

Rector of the Branch
Doctor of Economics, Professor Kalandar Abdurakhmanov

Foreword

ASSALAMU ALAIKUM WORAHMATILULLOHU WABARAKOTUH

MAY PEACE BE UPON US ALL,

OM SWASTI ASTU

I would like to begin my speech with words of sincere gratitude to Professor Margianti, our host, for the diligent and efficient work carried out by her staff to ensure such excellent organization for this Conference. I would further like to express my gratitude for the very warm welcome and hospitality extended to me and my colleagues.

Dear guests and participants on this international conference,

It gives me great honor to participate in the fifth Uzbek - Indonesian international conference that takes place in a unique place in the world on the island of Bali, where there is an ancient culture, traditions which immaculately observed more than a thousand years.

"Tri Hita Karana" is the Balinese philosophy that underpins the three relationships in human life in which harmony must be maintained. These are: the relationship between human beings and the natural environment, the relationship among human beings, and the relationship between mankind and God. If harmony among these three relationships is maintained, then prosperity will be achieved.

Relationship between University of Gunadarma and the Tashkent branch of the Russian Economic University named after Plekhanov, as well as other higher educational institutions in Uzbekistan are based on this philosophy, which aims to achieve prosperity.

Dear guest and participants of International Conference,

Today's conference is a small anniversary in the history between the University of Gunadarma and Tashkent branch of Russian Economic University named after Plekhanov. During the past four years alternately in Tashkent as well as in Indonesia there were successfully organized the international conference. During this International conference both side has exchanged and discuss important scientific works.

I am confident that this fifth international joint conference will also discuss the important scientific works.

I would like to note the important role of Professor Margianti in the development of public diplomacy in the educational system. In fact, University of Gunadarma is the only university in Indonesia, which signed a memorandum of understanding with a number of universities in Uzbekistan.

Moreover, University of Gunadarma, headed by Professor Margianti is pioneering a pilot project for the exchange of students.

So far, more than 10 students from Uzbekistan have passed training courses at the University of Gunadarma. At the same time, two students from University of Gunadarma have passed training courses in Uzbekistan.

Dear friends,

Using this opportunity, I would like to mention the important role of Doctor of economic science, the Professor Mr.Kalandar Abdurakhmanov. Being a rector of Tashkent branch of Russian Economic University named after Plekhanov, he made a great contribution to the education of the younger generation of Uzbekistan. He is the founder of scientific school of labour economics. Author of more than hundred scientific books.

Currently, his former students holds an important posts and positions in the government and they implement their knowledge in economic development of our country.

In addition, I would like to mention the role of Doctor of Economic Sciences, the Pro-

fessor Murat Ikramov. He also takes active role in developing cooperation with University of Gunadarma.

Dear guest,

In this context, I would like to note that the activities of the University of Gunadarma and its collaborations with the universities of Uzbekistan fully meets the Education Act and the National Programme for Personnel Training developed by our President H.E. Mr. Islam Karimov and adopted by the Government of Uzbekistan.

Again, I would like to thank Professor Margianti and her professional team who are making a huge contribution to the development of educational exchanges.

In conclusion, I wish our conference fruitful work, weighty and important suggestions and recommendations, which, undoubtedly, will be carefully studied and taken into account in the future works.

Wassalamualaikum Warahmatullahi-Wabarakatuh

Om Shanti Shanti Shanti Om

Shavkat Jamalov

H.E. Ambassador of Republic of Uzbekistan

Editorial

It is an appreciation for us to serve as editor for the proceeding of the Fifth Uzbekistan-Indonesia Joint International Conference held on October 29-30, 2015 at the Bali Dynasty Hotel, Kuta Bali, Indonesia.

We are glad to see variety of articles on general economics, financial, banking, management, linguistics in a broad sense topics. Some papers discuss and describe the use of Information and Communicaton Technology (ICT) for developing the economics and management area. ICT is believed to be able to accelerate the development of developing countries such as Indonesia and Uzbekistan.

We are delighted to the fact that the articles and participants are getting more international year by year since the first conference. It indicates that the conference is getting worldwide known and recognized. Scholars from five (5) countries contributed to this issue of the Proceedings. Special thanks are to all the reviewers, the management of Universitas Gunadarma, and those who involved in technical processes. The writers are not only the academician but also from government bodies.

We trust that you will enjoy the conference and we do hope that you will enjoy as well reading the papers. We are expecting also your contribution on Uzbekistan-Indonesia sixth Joint Conference which will be organized in Uzbekistan.

Editors

List of participating institutions

Rusian Economic University, GV Plekanov branch Tashkent
Tashkent Road Construction Institute (TARCI)
Tashkent Architectural Building Institute
The Slovak University of Agriculture in Nitra, Slovak Republic
Word Language
Oriental Institute of Language
Samarkand State Institute of Foreign Language
Ferghana Polytechnic Institute

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Modernization of financing of small-scale business and private business in Uzbekistan

Abror A. Kabulov
PhD associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

In the article there considered the role and importance of small business and entrepreneurship in the implementation of social and economic policy in Uzbekistan. In the article there revealed issues of development of entrepreneurial activities in Uzbekistan and most important directions of development of small business and private entrepreneurship.

Keywords : quality, monitoring, improvement, certification, economic education, small business, modernization, private entrepreneurship, financing.

1 Introduction

Financing small business and private entrepreneurship in Uzbekistan is one of the priorities of the government business policies for modernization of the national economy. Under these conditions, special attention should be paid to the mechanism of financing small business and private enterprise (hereinafter SBPE).

Today, small business and entrepreneurship (SBPE) with its important and substantial share in economy of Uzbekistan occupies a special place in the development of the state and society. Not by chance a top priority throughout the period of independent development is the creation of maximum favorable conditions, privileges and preferences providing comprehensive support for accelerated development of (SBPE), without which it is impossible to secure future of the economy.

President of the Republic of Uzbekistan Islam Karimov has repeatedly stressed that development with increased speed of this particular sphere is one of the most important factors of filling domestic market competitive and quality products, creating new jobs and on this basis to increase income and improve people's welfare.

As international experience shows that small business, being the most important structure-sector of economy, the main source of filling domestic market with essential goods and services. Being compact in form, having mobility and speed in decision-making, being receptive to innovation, small businesses more flexible and can adapt quickly to changes in demand, the situation on the global and regional markets, timely respond to his calls.

The article provided Modernization of financing of small-scale business and private business in Uzbekistan based on literature review.

2 Discussion

Creating and maintaining a small business does not require large expenditures and capital investments, which allows faster and easier to carry out modernization, technical and technological re-equipment, develop new products, constantly updating its range and ensure competitiveness. There is higher stability of this sector compared with large enterprises to the challenges and consequences of global financial and economic crisis. Small business is not only a source of income, but also a means to uncover creative and intellectual abilities of people. This scope allows everyone to show their individual talents and capabilities, thereby forming a new layer of people - enthusiastic, enterprising, prone to self-employment that can achieve this goal. The most important document adopted by the Central Bank of the Republic of Uzbekistan jointly with the Association of Banks of Uzbekistan, commercial banks, international financial institutions is the development of foreign funds and banks, proposals for the creation of Guarantee Fund. It provides provision of (SBPE) necessary maintenance for the part of unsecured mortgage for loans of commercial banks issued for the purchase of new equipment. As you know, one of the basic principles of credit-

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ing in the allocation of loans by commercial banks is a secured loan. The main problem of SBPE of the Republic is insufficiency of credit provision in investment projects financing. The problem of insufficiency of provision of credit by enterprises of SBPE exists not only in countries with transition economy, but in developed countries such as the U.S., Japan and EU countries as well. In these countries, the issue is solved just through the mechanism of guarantee repayment of loans by Guarantee Funds. Creation of Guarantee Fund for Development of entrepreneurship in Uzbekistan will expand access of thousands of business representatives to bank loans who wish to organize production and services on the basis of new, advanced technologies. Undoubtedly (SBPE) play an important role in shaping the structure of economy, meet rapidly changing market requirements. During recent years, the country has done much to create a favorable business climate and stimulate this segment of economy. As a result of the measures taken only in the past five years, the share of SBPE in the gross domestic product rose from 38 percent to 52.5 percent. Another interesting fact is today in this sector there are over 74 percent employee of total employed population. Only in 2012 due to the development of small business and entrepreneurship there created 480,000 new jobs. More than 60 percent of them are in the countryside.

Government of the Republic of Uzbekistan developed the State program, which provides implementation of the most important tasks in priority areas. In particular, it provides the most favorable business environment in the country as whole and regions. This refers to the implementation of concrete measures on further liberalization and promotion on the path of free market economy, providing greater freedom of entrepreneurship, small and private businesses, reducing government administrative functions and a variety of licensing regulations, elimination of bureaucratic barriers and obstacles. There will also be introduced market-based instruments and mechanisms to ensure access of small businesses to credit and financial resources and raw materials, state orders for their products, to develop and strengthen their links with employers, suppliers and customers.

An important differentiating factor in the conditions of the republic was the history of business, extent of its dependence from the public sector. As the study of foreign experience, a prerequisite for success in the development of SBPE is comprehensive and stable state support. It takes different forms: stimulating the production of high-priority products, provision of tax incentives, grants preferential bank crediting, creation of information-advice and scientific-technical centers, development of insurance system, organization of logistics, financial support, financial mechanism. Objectives of public financial support for entrepreneurs include:

- providing financial assistance to entrepreneurs for a fee and free of charge in the implementation of demonopolization programs, conversion of production in order to promote competition and saturation of commodity market in accordance with applicable law;
- fulfillment of function of pledger, guarantor, guarantor of the obligations of businesses;
- implementation of share participation in the establishment and activities of economic entities, ensuring development of market infrastructure, specialized consulting organizations and information systems supporting SBPE and competition, systems of examination and certification of consumer goods and services;
- conducting events aimed on attracting and efficient use of domestic and foreign investors, including contests, auctions, exhibitions, lotteries.

It should be noted that Asian Development Bank (ADB) consistently provided assistance to small and private businesses in Uzbekistan, including support for development of financial sector to improve access to financial resources. Main attention in encouragement of ADB to the development of SBPE implemented by providing credit lines on grand total of $ 170 million US dollars, and related technical assistance to development potential of financial institutions in operations with small businesses.

ADB implemented a second project "Development of small and micro-finance" and related to the project technical assistance to improve access to finance by small and private business in Uzbekistan. Activities financed by the ADB loan funds, created up to 30,000 new jobs by expanding opportunities in SBPE. The ongoing program included promotion of women entrepreneurs as well.

SBPE targeting is an essential element of state's economic strategy. Small business and private entrepreneurship is not a single entity. This property is determined by its objective characteristics such as the size of the enterprise and stage of its life cycle.

In 2014, commercial banks allocated subjects of SBPE business loans for more than 6 trillion soums. In 2015 the volume of credits allocated to subjects of SBPE, amounted to more than 856 billion soums, which was 1.3 times more compared to the same period of the previous year. From the given amount, micro credit made 183 billion soums, which means increase of about 1.4 times. Thus, there observed a very small proportion of investments in fixed assets, despite the significant growth trends in more than 9.3 times in the analyzed period at subjects of SBPE. At the same time total debt of small and private enterprises from the data shows a significant excess of extra credit from

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financial institutions than investments in the form of equity investments in companies, as a domestic source of funding. In order to support small and private enterprises in preference should be given to program-target method of planning, allowing to carry out such a comprehensive support using a variety of funding sources, both low and raised.

At the present stage, for provide financial support SBPE in Uzbekistan there created multi-level system infrastructure organizations, which allow ensuring unchecked access of small and private businesses to financial resources. Representatives of enterprises evaluate rather pessimistic probability of acquisition of bank loan. For example, 10% of respondents rated it more than 50%. At the same time the number of companies which applied for loans last year, estimate the probability of more than 50%.

Thus, the state should give preference to measures of indirect nature (risk sharing with market-based financial institutions - guarantees, partial compensation of interest rates) because of their lesser distorting effect on the competitive environment and stimulating effect (stimulation of small and private businesses to use borrowed funds). Positive aspects of activity of SBPE facilitate development of small and private enterprises: ability to respond quickly to changes in external and internal environment of the organization; awareness of entrepreneurial activity in economy; absorption unemployed labor force; reduce social tensions occurring in the conditions of economic crisis, because of its capacity to introduce innovations in different areas of production.

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Economic Growth and Its Features at Present Stage in The Republic of Uzbekistan

Alla Yu. Makushina
Senior teacher, Tashkent Branch of Russian Economic University
after G.V. Plekhanov, Republic of Uzbekistan

Abstract

In the article there considered theoretical aspects of economic growth and its feature in the Republic of Uzbekistan at present stage.

Keywords : economic growth, extensive and intensive economic growth, factors of economic growth, gross national product.

Economic growth is considered as a major economic objective of any country. Increase of products volume per capita means an increase of living standard in the country. The economy is growing, which is capable to satisfy people's requirements more completely and more effective to determine social and economic problems. Revenue increasing in economic growth creates possibilities for families and other people to receive additional property welfare and services from consumption of other vital welfare. Economic growth allows the country to fight against poverty and environmental pollution without decreasing existing consumption level and reducing investments. It creates possibilities to reduce working hours and increase time for a rest and leisure. Economic growth facilitates solution of resources limitation problem. Also it allows the people to save state independence.

Economic growth is understood as an increase in volumes of goods and services for certain period (increase in potential and real GNP), increase of economic power of the country.

There allocated two types of economic growth: extensive and intensive. The first type of economic growth is extensive (from Lat. "Extensivus" - extending). In this case an increase in output volumes occurs at the expense of accumulating three factors:

- fixed capital (funds);
- workforce; and
- material expenses (natural raw, materials, energy carriers).

Thus output growth is directly proportional to quantitative increase in factors of production. There is a direct proportional dependence between output volume and costs for production. The second type of economic growth is intensive (French – "Intensive" - pressure). Its basic difference from extensive growth is in the fact that increase in production scales at this type of growth is reached at the expense of increase of efficiency of used production factors. As a rule, the reference point is made on:

- using more progressive techniques, high technologies;
- using more economic materials, energy carriers;
- improving personnel professional skill, i.e. qualitative enhancement of all production factors.

Thus qualitative transformation of factors is accompanied by quantitative reducing traditional factors in production modernization on the basis of achievements of scientific and technical progress.

In a real economic practice there is no purely extensive and intensive type of economic growth as they are intertwined. Therefore there talked mainly about extensive and intensive types of economic growth depending on share of those or other factors which have caused this growth.

Process of economic growth includes interaction of its factors. In macroeconomics there allocated three groups of factors of economic growth, determining sources of economic growth, i.e. factors which make economic growth physically possible. The following are referred to them:

- offer factors (availability of manpower resources, natural resources, fixed capital, and technological level);
- demand factors (price level, consumer expenses, investment expenses, state expenditure, and pure volume of export); and

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- distribution factors (rationality and completeness of involving resources in production process, efficiency of using resources involved in economic turnover).

The Republic of Uzbekistan s one of the first country among the CIS countries which entered a phase of economic growth, and in 2001 recovered pre-reform level of production according to indicator of gross domestic product (GDP).

If we compare rate of economic growth of 2014 to 2013 gross domestic product has increased to 8.1 percent in Uzbekistan in 2014 in comparison with 2013, industrial output volume - 8.3 percent, agricultural production - 6.9 percent, capital construction - 16.6, retail turnover - 14.3 percent, about 70 percent of produced goods are final products with high added value.

In order to preserve high rates of economic growth there made a lot in the Republic of Uzbekistan. A major factor providing steady rates of economy growth is reforming bank system therefore growth of aggregate capital of commercial banks has made almost 25 percent.

Strengthening bank system created necessary preconditions to decrease rate of refinancing Central bank from 12 to 10 percent and corresponding reduction of interest rate on credits of commercial banks in 2014. In comparison with 2013 credits volumes allocated with banks only on financing programs of modernization and technological productions renovation have increased in 1.2 times, and replenishment of circulating assets - more than in 1.3 times.

Besides, in the Republic of Uzbekistan there took measures on improvement of business environment and creation of more favorable conditions for development of small business and private entrepreneurship that also is the main factor of economic growth.

Introduction of "one window" principle at property registration, allocation of ground areas, obtaining licenses for employment by separate types of activity, issue of building licenses, connection to electrical supply networks are widely circulated.

A mechanism of granting statistical and tax reporting by subjects of small business is considerably simplified. Now to 98 percent of business subjects pass tax and statistical reporting, arrange customs declarations in contactless form - electronic one.

In 2014 commercial banks allocated credits for the sum over 9 trillion soums or in 1.3 times higher than in 2013, including microcredits - at the rate about 2 trillion soums, with the growth to 39 percent of subjects of small business and private entrepreneurship. Volume of crediting of small business has increased almost in 5 times Last five years.

As a result of conducted measures on stimulation of development of small business and private entrepreneurship in 2014 there created over 20 thousand new subjects of small business without farmer and peasant economy, and their total quantity has made over 195 thousand that is 2 times higher in comparison with 2000.

A share of small business and private entrepreneurship in forming gross domestic product has grown about 31 percent to 56 percent and in industrial output production - from 12.9 to 31.1 percent since 2000.

In renewed rating of countries published by World Bank Uzbekistan rose from 72nd place to 66th in 2010 according to the level of economic development determined on size of gross domestic product calculated at par consumer capability among 190 countries of the world.

Major instrument of dynamical and balanced economic growth, realization of deep structural transformations and economy diversifications is carrying out active, address investment policy.

In 2014 investment volume in economy of Uzbekistan has increased to 10.9 percent and made equivalent of 14.6 billion US dollars. Thus over 21.2 percent of all capital investments or more than 3 billion dollars make foreign investments and credits from which three quarters are direct foreign investments.

Distinctive feature of investment policy conducted in Uzbekistan consists in the fact that priority is given to investment projects directed on creation of new hi-tech production, local source of raw materials providing deep processing. In 2014 in leading industries of economy there implemented 154 large objects with total cost of 4.2 billion dollars, furnished with modern hi-tech equipment.

Major reserve and factor of strong growth of economy is service sphere. As the world experience shows, today this sphere occupies a leading position in gross domestic product forming, provision of population employment, growth of people' welfare.

According to the results of 2014 a volume of rendered market services have increased to 15.7 percent, and their share in gross domestic product structure has increased from 53 to 54 percent. This sphere creates more than 50 percent of occupied in economy now. This sphere include more than third of annually created new workplaces, first of all for young specialists graduating from professional colleges.

Thus, all above mentioned data testifies that in the Republic of Uzbekistan all measures are undertaken for achieving high rates of economic growth.

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Determinants of Economic Strategy of Creating and Functioning Enterprises in The Conditions of Special Zones

Lilya Sh. Ubaydullaeva
Tashkent Branch of Russian Economic
University after G.V. Plekhanov

Abstract

The article describes main determinants affecting strategic decision-making onthe establishment of enterprises operating in the conditions of special zones. Improving the regulatory process, functioning of special economic zones in the course of their organization allows us to solve essential problems of the economy of Uzbekistan.

Keywords : investment, economic strategy; Special Economic Zone, determinants of economic strategy, administrative regime, tax incentives, free customs zone regime, public-private partnership.

Modern conditions of business development associated with highly dynamic external environment of the enterprise, increasing complexity of industry competition in the markets, rapid development of information technology, globalization of business, actualize the strategic aspects of business management. The positive dynamics of economic growth of gross domestic product of the Republic of Uzbekistan depends on the level of development of its industry. The productive technology and methods of development of industrial enterprises is an important part of that development, increasing their effectiveness in the current economic conditions. One of those technologies is a creation of industrial sites and other forms of territorial organization of economic systems. These modern forms of organization, which are called free economic zones (FEZ) abroad and their counterparts in the Republic of Uzbekistan - special industrial zones, help to strengthen innovative components of their development to industrial enterprises, increase labor productivity and impact of resources, optimize their information, material and financial flows on the basis of favorable economic conditions.

FEZ is a separate territorial and geographical enclave with a certain degree of isolation from the rest of economic space of the country. It is a factor of accelerated economic growth for account of increasing international trade, mobilizing investment and deepeningintegration of economic processes.

The law of the Republic of Uzbekistan "On free economic zones" [anonymous, 1996] gives legal definition of FEZ "Specially designated area with clearly defined administrative boundaries and a special legal regime created in order to attract domestic and foreign capital, advanced technology and management experience for acceleratedsocio-economic development of the zone".

Nowadays in Uzbekistan there is a positive practice of creating free economic zones. For example in the Republicthere operate several objects like free industrial-economic zone "Navoi" [anonymous, 2008], special industrial zones "Angren" [anonymous, 2012] and "Jizzakh" [anonymous, 2013], representing a form of production zones .

These zones are created for a period of thirty years. In those FEZ, established on the territory of Uzbekistanthere set special custom, currency and tax regime and also special procedure of entry and exit, labor relations, financial and credit activities and other conditions aimed at attracting investment, promoting entrepreneurship and socio-economic development of the zone.

In accordance with the concept of creating and selected priorities of FIEZ "Navoi" the companies of such fields and areas as production of electrical products, production of telecommunication equipment, machine building, instrument-making and production of component parts, production of medicinal products and medical equipment, processing and packaging of food products, manufacture of plastic and plastic products. At the same time, basing on the concept and selected priorities of the SIZ "Angren" on the territory ofspecial zones there placed companies of such fields and areas as: electrical engineering, mechanical engineering, chemicals and petrochemicals, pharmaceuticals, food processing and deep processing of fruits and vegetables, production ofmodern building materials, leather industry and others.

Let us consider main determinants influencing

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policy decisions on the establishment of enterprises operating under conditions of special zones:

The first block of determinants for potential investors is a creation of engineering infrastructure at the expense of the state - roads, communications, energy and building. In the Republic of Uzbekistan establishment of FEZ is based on the public-private partnership, which is to co-invest budget and private investments in development of the territory. The state is responsible for construction of the infrastructure; private business is responsible for commercial sites.

The second set of positive factors is associated with the regime of friendly administration, which is an actual reduction of administrative barriers and a number of control measures. Stimulation of investment activity of FEZ residents is carried out not only through the provision of tax incentives and establishment of special customs regime - free customs zone, but also by establishing regime of administrative features. The specifics of the administrative regime operating on the territory of FEZ, is first of all, to consolidate a special order of the activities of state control in the territory of FEZ.

The third block is free customs zone, which is a good incentive for the import of high-tech equipment. This mode assumes that all raw materials and technological components will be imported to the zone and export abroad without payment of VAT and customs duties. For import-dependent industries with longtermof production it is a good investment opportunity.

The fourth unit is granting of tax preferences, evenif not the biggest in the world: exemption from land and property taxes, tax breaks on profits made by laws passed by state and regional legislative assemblies.

All these factors provide a unique synergy of entrepreneurial potential in special zones. Particular attention is paid to the state regulation of FEZ. It is a system of coordinated action by the State to achieve goals and tasks undertaken in the course of zonal policies for the effective functioning of national economy as a whole and its components. The role of state regulation of FEZ is reduced to the organization of work, identification of priority projects, site selection, preparation and provision of legal and institutional framework. The scope of state regulation of FEZ covers all financial, organizational, economic, legal and regulatory issues, which are impossible to anticipate and resolveobjectively at lower level of management.

Due to improvement of the regulatory process and functioning of FEZ will allow solving the vital problems of the economy of the Republic of Uzbekistan:

- Creation of conditions for the development of innovation infrastructure providinguse of the results of scientific researches and development with limited involvement of state funds
- Use of mechanisms and incentives for the development of innovative organizations working in the field of technology commercialization
- Training of managers for innovation in scientific and technological industrial areas
- Involvement of capital investments in priority sectors of the economy
- Improving competitiveness of enterprises and technical level of production, substitution of imported products by own products
- Improving efficiency of industrial enterprises based on new technologies and development of high-tech products production
- Expansion of information services, development of new technologies of production, and others

Analyzing the benefits of special zones, one cannot mention problems. Infrastructure problems hinder the natural growth of FEZ. Among the reasons due to which the development of FEZ in the Republic of Uzbekistan is notof general nature, is a set of benefits still not definitely attractive for domestic and foreign investors.

Structures, similar to the FEZ of the Republic of Uzbekistan, function in many countries, including China, India, Turkey, Israel and Kazakhstan, where the development of areas is more dynamic. Many failures observed even at the planning stage of FEZ. Experts note the underdevelopment of social infrastructure, lack of long-term business model from managing companies. In addition, in the Republic of Uzbekistan unusually prolonged preparatory stage, so the benefits are not always determinant factor in choosing the territory of business organization. There arelarge gaps in the regulatory framework of the FEZ. The tool of "one window" is insufficiently effective in relation to the FEZ. This complex of problems hinders the development of special economic zones and forces investors to calculate the risks more carefully.

However, the whole set of all of these problems can seriously affect the process of creating and developing structures with special conditions and strategic decision-making of entrepreneurs to invest residents of FEZ.

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Higher Education as A Major of Growth and Development of Economy

Mukhtorkhon M. Tashkhodjaev PhD,
associate professor
Tashkent State University of
Economics, Republic of Uzbekistan

Lola N. Khazratkulova

Senior teacher, Tashkent Branch of
Russian Economic University after
G.V. Plekhanov, Republic of
Uzbekistan

Abstract

In modern conditions education is becoming a major condition of introduction of new technologies, growth of competitiveness and increase of a standard of living in all spheres of human activity. Social responsibility of higher education appreciably consists in that each person could receive such qualifying and social skills which will allow them to be in demand on a changing labor market, participate in developing innovative economy and, thereby, provide own well-being and welfare of society as a whole. '

Keywords :higher professional training, a sustainable development of economy, investment into human capital, scientific researches and workings out, objective processes of globalization, information and communication technologies

In modern conditions when there is change of the structure of population employment share of intellectual labor increases in manufacture, requirement of society in unskilled labor decreases, there sharply raise the issue on searching additional sources, internal reserves of economic growth of the country. One of such sources is the population educational level.

"Education is a major subsystem of social sphere of the state which provides reception of the systematic knowledge, skills with further purpose of their application in professional work".

The researchers conducted by many economists allowed to draw a conclusion that education generates different external effects one of which are growth of level of social tolerance, more active participation in the process of democratization of society, and solidarity at national and international level as well. It has been noted that there is a clear link between reception of higher education by citizens and their participation in public life, socially significant affairs, and social and cultural benefits of higher education, in turn, it does not only facilitate the improvement of social conditions, they have also direct economic benefit.

Results of conducted researches confirm that economic growth of the state is caused by expansion of the volume of used labor and capital resources, and improvement of their quality on the basis of progress in the field of technologies and education. In this connection considerable attention is paid to studying of human capital, as paramount lever of economic growth.

Classics of political economy V. Petti, A. Smith and D. Ricardo suggested the idea of realization of expenses in improvement of professional skill of a worker as a capital. The essence of "theory of human capital" consists in that investment in education and public health services create human capital just as expenses for equipment and materials and physical capital. Feature of human capital is in its inseparability from a person, and investment into human capital is all expenses which lead to improvement of professional skill and abilities of a person, and as a consequence, productivity of his or her work. Thus, investments into education are considered as investment into quality of human capital.

Important sphere by means of which influence is carried out of education on economic growth are scientific researches and elaborations (Scientific and research elaborations). Education, especially higher education has a huge value for development of Scientific and Research Elaborations and defines abilities to master innovations and adapt to them. The countries advancing the others on rates of development of Scientific and Research Elaborations gain long-term advantages over competitors.

It is necessary to consider prominent features of such kind of expenditures at realization of investments into science and education sphere, professional and qualification development of labor.

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First, investments into education is not only influence on development of creative abilities, professionalism, increase of social status of each individual, but also influence reproduction of is intellectual-spiritual potential of society as a whole.

Second, such expenditures are realized simultaneously, and cover the expenses during several cycles of production process, and there required retraining workers in connection with the changed requirements of innovative updating of manufacture. Thus, investments into education receive the form of circulation similar to turnover of fixed capital.

Thirdly, educational process assumes necessity of mastering by constantly updated system of knowledge that will allow conducting reproduction of labor of higher qualifying level.

Furthermore, investments into education is not only expenses for building new and reconstruction of operating objects of education, their material equipment, but also on the organization of educational process, working out of training technologies, management of the process of preparation, retraining and improvement of professional skills.

The primary goal of higher educational establishments is quality maintenance of education. This problem can be realized only if there created favorable conditions such as development of modern material, information and personnel resources for this purpose. To achieve the goal there is necessary equipped offices, electronic and printing tutorials, demonstration and laboratory equipment, interactive and multimedia complexes which are necessary to provide high quality of education.

Today education in the Republic of Uzbekistan represents purposeful process of education and training in interests of a person, society, the state accompanied by achievement ascertaining trained established by the state the educational levels. Serious reorganization of education system was required with the beginning of market transformations. New conditions have changed requirements to the structure of preparation of specialists with higher education, to their knowledge and skills. The personnel, who generate new knowledge, understand spectrum of innovative possibilities in concrete professional area skillfully is in demand. They should be high quality specialists who are capable not only to solve current economic and industrial issues competently, but also possess analytical abilities, able to make right decisions.

Aspiration of Uzbekistan of being integrated into modern industrial world has insistently demanded from the country to create the system of higher education, which is capable to adapt quickly to changing requirements of labor market. Development of competition creating stimulus for development of higher educational establishments and granting qualitative educational services is becoming necessary.

Modern objective processes of globalization of society led to universal use of means of information and communication technologies, including high school. It is connected by that informatization of education provides increase of efficiency of all kinds of educational activity and improves quality of preparation of specialists with a new type of thinking according to requirements of a modern society.

In connection with it “development of education acts as one of the major priority directions of expenses of the budget of the Republic of Uzbekistan.”

Expenses on education in relation to major macroeconomic indicator have increased in addition to the annual growth of gross domestic product of the Republic of Uzbekistan as well. In 2015 expenses on education should make 7.3% from the means of consolidated budget to gross domestic product. For comparison: in Russia expenses on higher education make no more than of 0.71% from the means of consolidated budget to gross national product. On the average among the countries of Organization of Economic Cooperation and Development the state expenditure on higher education makes 1.5% of gross domestic product. It makes about 2% of gross domestic product in Denmark and Finland, Norway and Switzerland spend for higher education about 1.6% of gross domestic product, and these are the richest countries of the world on gross domestic product per capita. At the same time 1.5% of gross domestic product is optimum for financing higher school in definition of budgetary funds by estimates of foreign experts.

So, it is possible to accept that the higher the educational level in the country, the better develops its economy there is low unemployment and high life expectancy. Besides, good education of population influences positively on other spheres of life of society, for example, on quality of government management and social sphere.

Thus, higher education is a key tool for transition of Uzbekistan to sustainable development, providing formation of knowledge, abilities, sights and values at citizens which are necessary for their active participation in social and economic life.

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Essence And Role of Youth Policy of The State In Development of National Economy

Luiza M. Ashurzod
Teacher
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

The state youth policy is a set of measures of legislative and executive character directed on realization of requirements of youth, its adaptation in modern society. To express and protect interests of young people, without opposing, and correlating them to the general public interest, is a major task and function of the state youth policy. Young people have powerful innovative potential. Recognizing need of material and spiritual support of youth, granting privileges to it owing to insufficient social security and difficult starting conditions, reference points of modern youth policy are directed on assistance to young people in self-organization and self-realization.

Keywords :economy, labor, youth, youth policy, social sphere, employment, education, profession, creativity

The youth makes more than 60% of the population of Uzbekistan today. It is natural that care of education of harmoniously developed younger generation – physically healthy and spiritually mature, intelligently rich, possessing not only versatile knowledge and professions demanded in the modern world, but also able to think independently, creatively became a key priority of all positive transformations in the country. After all, as the President Islam Karimov emphasizes, the most noble purposes facing us today, and great future of our country, and our tomorrow, free life and prosperity, and what place will take Uzbekistan in the world community in the XXI century, – all this depends first of all on new generation.

The strong youth policy pursued in our country has the strong legal base. It is reflected in the provisions of the Constitution of the Republic of Uzbekistan, 22 laws and normative legal acts concerning this sphere. It is symbolical that the Law "On fundamentals of the State Youth Policy in the Republic of Uzbekistan" of November 20, 1991 became one of the first acts adopted in our country after getting independence.

The highest recognition was gained around the world by the national models of formation of health, continuous education and education of harmoniously developed younger generation created in our country.

In days of independence according to the requirements of democratic and market transformations cardinal reforming of education system and training is carried out. Deep reforms in this major sphere are carried out on the basis of adoptedunder the initiative of the President Islam Karimov on August 29, 1997 of the Law "on education", and also unique on scale, complexity and purposes of National program for training. Education in our country is proclaimed priority sphere of development satisfying economic, social, scientific and technical and cultural needs of the personality, society and state. Besides reforming taking into account requirements of time of existing educational institutions there educational created institutions of new type which don't have analogs in the CIS countries – professional colleges and academic lyceums were created. Thus, unique uniform system of continuous educational and research and production education focused on preparation of highly qualified, competitive personnel for all branches of economy and social sphere, ensuring spiritual and moral education and all-round creative development of youth was created.

Public management of the youth sphere includes development of conceptual areas of work with the youth, providing complete system of social and economic, organizational measures for creation of social and legal guarantees for younger generation, realization of its right for free social development, creative initiative.

In this context authorities of all levels are urged to provide conditions for development of youth.

These conditions are created by formation and development of effective legislation on the state youth policy.

Certain member states of the UN since the end of the 50 – the beginning of e 60 of the XX century started pursuing purposeful policy for younger generation. Implementation of state youth policy reflects one of objective regularities of present stage of world development connected with continuous strengthening of the role of "youth factor" in social and economic and political processes.

According to the UN, more than 130 countries adopted special acts for issues of development and social protection of youth, about 90 countries have bodies and structures which are directly developing and coordinating state youth policy at the highest state level.

The care of younger generation was proclaimed one of important tasks of the UN from the very beginning of its activity. With adoption in 1965 Declaration on distribution among youth of ideals of world, mutual respect and mutual understanding between the people" by United Nations General Assembly social problems of younger generation is in the center of attention of this organization. Through UNESCO since 1979 over hundred documents on youth problems were adopted. Under the auspices of UNESCO since 1985 the World congress concerning youth works, "round table" on a subject constantly works: "Youth. Education. Labor", World festivals of youth and students are held. The International Labor Organization (ILO), Children's fund UN (UNICEF), World Health Organization (WHO) were connected to studying youth problems and their permission.

For the last decade bodies of the UN adopted more than 50 resolutions concerning youth. Their main goal – implementation of coordination in the solution of most common youth problems, strengthening of cooperation with non-governmental youth organizations and establishments.

Special value in new economic conditions has state warranties on ensuring economic independence and support of young citizens in realization of the right of youth for work.

Sociological researches allow declaring these directions as about the most significant for people at the age of 18 years and more. On mentioning frequency are the most actual:

- Unemployment, employment problems (45%); and
- Low compensation at the state and municipal enterprises, in establishments (35,9%).

The youth is the most important labor and economic capacity of society on which its progressive development depends. Therefore policy of any state has to be under construction quite so to provide the most effective education, full education, successful specialization.

Today it is possible to claim that in our country new generation was created. The state youth policy is a driving force in integration of efforts of various youth state and non-state organizations, in creation of legal, economic and organizational conditions and guarantees for self-realization of the identity of young man and development of youth associations and movements.

In recent years the youth organizations became really wide field for realization of huge intellectual and creative potential, spiritual energy, creative spirit of younger generation.

According to researches of the center of studying public opinion "Izhtimoy fikr", today most of pupils and students are well informed on activity of these organizations, every third is the direct participant of this or that action, competition or competitions which are carried out by these organizations.

It is also necessary to note that youth policy of the state stirs up creative activity of various public organizations. It is possible to give competitions and reviews of student youth which are carried out in regions of the country as an example. Competition of the creative written works which are carried out in all educational institutions of the country is of special interest. This competition is held in several stages. Today each pupil or the student is active, interested participants of competition of written works in all regions of the country.

The creative rush of youth is shown in debates of pupils and students carried out at comprehensive schools, lyceums, colleges and higher educational institutions. Only in 5 months of the current year more than 2 million pupils and students of the republic were directly involved in debates on identification of best talents and intellectuals among youth.

It should be noted, in Uzbekistan there is an intellectual welfare process, that is, mass splash in educational and creative rush of youth which opens open spaces of spiritual potential of younger generation.

Ultimate goal of this process is comprehensive training of young people for life, for independent development able to resist to various ideological influences and solving vital problems.

As our President Islam Karimov told: "In our country, annually more than 600 thousand of young specialists conforming to requirements surely start their lives becoming really decisive force of our society. This new generation of purposeful young men and girls with the eyes burning with enthusiasm mastered not less than two-three professions knowing foreign languages, information technologies and Internet, modern knowledge ready as equals to compete with contemporaries from de-

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veloped countries, considers our people the biggest support and hope, it is possible to tell, invaluable potential. Having such youth, we will never turn off chosen way, and all of us are firmly sure of it."

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Corporate Governance Ratings: A Benchmark for Investors?

Mikhail B. Khamidullin
Tashkent Branch of Russian Economic
University after G.V. Plekhanov

Abstract

It is becoming more common for investors to consider governance issues when making investment decisions. In response to this interest, several organizations now rate corporate governance practices of public companies, either as a stand-alone offering or as a part of credit rating. This article provides an outline of governance ratings and discusses why those are so important in some cases. It also introduces a new rating such as Governance Metrics National (GMN) and its usefulness for Uzbek investment climate.

Keywords : corporate governance, corporate governance ratings, governance metrics national, shareholders, investors, corporate governance ratings agencies

For good reasons, today an open and transparent business as intangible asset helps company to build ongoing relationships with investors and attract necessary funds for the company. At the same time, investors' interest in corporate governance issues regarding disclosure, governance and accounting procedures has dramatically increased as well. This increasing interest on governance has also caused a proliferation of rating systems. Ratings are now being used as a benchmark in investment decision making process.

A joint study conducted by well-known Uzbek consulting firms and regulators, showed that overwhelming majority of investors is now considering corporate governance practices as a major factor in investment decision making process. And very often this factor is even more important than finance indicators of the company, especially for companies from emerging markets such as Uzbekistan. For the shares of companies in which corporate governance is based on clear and acceptable principles, investors are willing to pay more. A study undertaken by professors Paul A Gompers, Joy L Ishii and Andrew Metrick, entitled "Corporate Governance and Equity Prices", demonstrated "that firms with stronger shareholder rights had higher firm value, higher profits, higher sales growth, lower capital expenditures, and made fewer corporate acquisitions". According to surveys, the premium that investors are willing to offer for the shares of companies with formidable corporate governance practices runs up to 20%. This supports the simple proposition that greater shareholder governance translates into greater shareholder value over time.

Although the issue of corporate governance is being discussed widely in Uzbekistan, corporate governance ratings are not applied enough. Sometimes the poor corporate governance in some Uzbek companies curbs the inflow of foreign investments into Uzbek business, which causes high speculations of investments in the Uzbek stock market.

The roots of corporate governance problem lie in national model of privatization. After privatization phase in 90s, the major part of partnership property was in the hands of company executives (insiders), while minority shareholders (usually employees of company) got only a limited access to company assets. Hence, transparency of business in those times was not in common practice. Today interest of mass media and investors in corporate governance is a standard action, and institutional and retail shareholders are now achieving impressive successes on shareholder ballots. This increasing focus on corporate governance has also caused proliferation of published rating systems. With these developments, CEOs should address the implications of the rating programs and the criteria they use.

But why should a company care about corporate governance ratings? Widely known credit and debt rating S&P also offers today the S&P Corporate Governance Scoring Service, which approaches the governance rating with a process more similar to its debt rating, and benchmarks governance practices to corporate governance standards on a global basis. The core principles of S&P Corporate Governance Rating are: transparency, fairness, responsibility and accountability. These are the basis for S&P's corporate governance scoring methodology which can be used to analyze the corporate governance level for both individual companies and countries. The most important components of S&P Corporate Governance Score are:

- Transparency, disclosure and audit

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- Shareholder rights and stakeholder relations
- Board of directors structure and effectiveness
- Ownership structure and external influences.

New regulations favoring shareholder governance can be adopted from international practice. For example, mutual funds must be required to disclose publicly their voting policies and voting records. Such practice provides shareholders a significant access to company proxy materials to nominate a CEO (director) where shareholders previously received shareholder approval for a proposal which was not acted on by the company. In addition, for Uzbek practice, it could be useful to implement a proprietary system of ratings which can play a role of important indicator of potential investment risk. Such rating system is comprised of five key areas:

- Accounting and audit oversight
- CEO compensation
- Board of directors structure
- Board of governors structure
- Outside director shareholdings.

Talking about the improvement of company governance ratings, its executives should implement following practice:

- Discuss and negotiate issues with rating services
- Monitor current topics such as diversity, non-audit services, staggered boards etc
- Actively review ratings
- Correct inaccuracies in ratings
- Encourage discussion with rating authorities
- Review the governance rating criteria in order to avoid low rating

Although it is still unclear how important the corporate governance ratings are for investors, the utility of such ratings is very high. That is why it is crucial to have so-called Governance Metrics National (GMN) rating. The idea behind such GMN rating is that this rating would evaluate governance practices. GMN would include institutional investors, law and accounting firms, insurance underwriters, mutual funds, pension funds, regulators and others. GMN as a national rating product is based on scoring algorithm and includes all companies all over Uzbekistan.

GMN includes the following sectors of national market as:

- Financial services, insurance and banks
- Technology and communications
- Automobiles and cyclical industrial sectors
- Healthcare
- Media and telecommunications
- Chemicals
- Construction
- Retail
- Utilities

The Basic Rating of GMN is based on information provided by companies themselves (i.e. on the web page of the company), litigation and regulatory sources, and on some other information collected by GMN itself. The Comprehensive Rating of GMN is more detailed and based on analysis of governance practices. This rating reviews information provided by the company which is not available to the public and includes interviews with members of the senior management team. The Comprehensive Rating is a means to provide transparency and warrant investor consideration. In many ways it is also subjecting itself to a form of non-financial due diligence.

The GMN approach includes a comprehensive review of the following national sectors:

- Financial disclosure and internal controls
- Shareholder rights
- Executive compensation
- Board accountability
- Corporate behavior and corporate social responsibility issues.

GMN rating is focused on corporate governance and provides more information on the quality of governance practices at specific national companies of Uzbekistan. New developments that are included in GMN rating are derived from the following common questions:

- How reliable is the underlying theory of Corporate Governance (CG), in particular the relation between good CG practices and higher performance? (Answer: Not 100% reliable)
- Are the cultural and contextual differences between companies taken into consideration by CGR agencies? (Answer: no, not always)
- Is there any correlation among different rating systems? (Answer: Recent studies show small correlation).

The negative answers to the above mentioned questions bring us to the following conclusions:

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- Different studies in CG rating and firm performance lead to different results
- CG rating cannot give an accurate forecast about firm performance
- Investors should not base entirely on commercial CGR in their investment decision
- More time needs to be invested into the perfection of governance rating database
- Need for greater use of qualitative research methods like directors interviews.

To some extent ratings are relative, and they also become less important over time as practices generally improve and the bar is uniformly raised. Many large institutional investors have their own programs for measuring governance and do not rely on a service to measure these issues. Others simply do not think these ratings are relevant to investment decisions about the quality of a company or its management. Nevertheless, both investors and issuers may find it increasingly difficult to avoid the implications of governance ratings which may be viewed as a proxy to a company's regard for its shareholders.

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Role and Value of Budgetary System in Social and Economic Development of The State

Mukhammadbek M. Irmatov
PhD, associate professor, Tashkent
Branch of Russian Economic
University after G.V. Plekhanov
Republic of Uzbekistan

Abstract

Budgetary system act as major tool and assistant to state regulation of economic processes, decisions of sociopolitical problems in the conditions of market modernization. In the given article a special attention is paid to definition of the most effective ways of formation of the budget; consideration of mechanisms of application, and as necessity of using state monetary resources; revealing available financial reserves and lacks, at budget execution; definition of optimum structure of sources of money resources and combination of mechanisms for the most harmonious and effective development of economy.

Keywords :state budget, budget, financial system, budgetary system, budgetary process

Central link of financial system of any state is a state budget, i.e. the budget appears practically with occurring of the state. However only with accession to the organized power the budget gets the form of the document confirmed by legislature. The ancestor of the budget and process of its statement is England.

At the present stage a distinctive feature of the state budgets is their increasing role in redistribution of national income.

Thus, state budget represents a system of monetary relations expressing movement mainly of net profit of the society in the process of which there formed and used centralized fund of the state with a view of performance of its function by it.

By its form state budget acts as a list of incomes and expenses of the state on a certain term, confirmed in legislative order. The statement of the budget by parliament gives the force of law to the budget.

By its material maintenance state budget is a centralized fund of monetary resources of the state, and by its social and economic essence is a basic tool of redistribution of national income.

It is necessary to note that rate of increasing gross domestic product in 2014, predictably, actually made 8,3 %, and for the period of 2000-2012 gross domestic product volumes increased in 2,1 times, and on this indicator Uzbekistan is among most dynamically developing economies of the world.

The budget and budgetary system not simply register and supervise what is created in the process of production, but also actively influence this process, accelerating or slowing it down.

In the course of distribution of gross domestic product, state has monetary relations with legal (organizations) and individuals (population). On this basis for satisfying nation-wide requirements there formed and used centralized fund of money resources of the state.

The state budget as an economic category expresses system of economic relations, arising between state and other participants of social production in the process of distribution and redistribution of cost of cumulative public product and part of national wealth by formation of centralized funds of the state and their use on the purpose of expanded production, satisfaction of social and other public requirements.

Centralization of financial resources is necessary for financing government programs, maintaining separate territories and manufactures, carrying out social and cultural measures, maintaining on corresponding living standard of the population, maintaining defense capacity of the country, covering general costs of the government; granting subsidies and subventions to local budgets at the expense of the republican budget and other expenses of the state.

As a legal category, budget is a basic financial plan of the state, list of its incomes and expenses.

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Budget is also considered in material sense. Budget is a state centralized fund of monetary resources by its material maintenance.

Positive qualitative changes occur in structure of sources of financing and directions of using capital investments. Over 73% of all investments is formed at the expense of own intra republican sources - own means of the enterprises and population, credits of commercial banks which more and more actively participate in investment processes, and also means of the state budget and off-budget funds.

In the Law "On budgetary system" there specified "State budget is a centralized fund of monetary resources of the state (including means of the state trust funds), providing sources of incomes and sizes of receipts from them, and also directions of expenditure and sizes of the means allocated for specific goals within fiscal year".

The state budget plays a considerable role in political and economic life of the country. Budgetary process covers four stages of budgetary activity:

- Drawing up the budget project;
- Consideration and budget statement;
- Execution of budget and control over its execution; and
- Drawing up the report on execution of budget and its statement.

Component of budgetary process is a budgetary regulation of redistributing financial resources between budgets of different levels.

Owing to that the Republic of Uzbekistan is a unitary state, therefore structure of the state budget of the state includes republican budget and local budgets of Uzbekistan, Local budget of the Republic of Uzbekistan (regional budget) – a form of formation and expenditure of monetary resources intended for providing problems and functions, related to subjects of conducting local governing bodies.

The subject of local budget takes part in distribution of incomes and expenses between kinds of budgets, either is a participant of budgetary process, or receives from the higher budget monetary resources in the form of budgetary financing or budgetary crediting (budgetary loans), i.e. such public relations which are regulated by laws, get the form of budgetary legal relations.

So, local budget will be characterized by the current legislation as "a part of State budget, making the fund of monetary resources of corresponding region, district, and city, providing sources of incomes and sizes of receipts from them, and also directions of expenditure and sizes of the means allocated for specific goals within fiscal year".

Subjects of territorial bodies, their budgets (at all declared independence) are rather vulnerable and completely depend on the policy of republican authorities. Annually considering the budget - subordinate budgets face acute problems connected with intra budgetary relations, first of all with distribution of taxes, expenses and authorities for expenses between all levels of budgetary system.

The operating system of intra budgetary relations carries out practice of individual planned coordination of volumes of incomes and expenses of local budgets, their financial support. Distribution of means of fund of financial help to regions is carried out on alternative rules by Ministry of Finance of the Republic of Uzbekistan in corresponding order that expands possibilities of making objective decisions.

Certainly, expansion of a spectrum of methods used at privatization, basically, can promote stimulation of economic growth and carry out institutional transformations, reducing state expenditures and optimizing property structure.

But, as budget takes central place in the financial system of any state, it is the basic form of formation and expenditure of fund of monetary resources intended for financial maintenance of tasks and functions of the state as a whole and local government in particular.

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Role of Informatization System in Economy and in The Life of Society

Munira Ya. Isokhujaeva
PhD Senior Teacher
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

The infrastructure of society and its economy are interconnected and interdependent, as development of economy is followed with infrastructure development which whereas leads to further development of economy. At todays stage first of all, development level of information and communication system; determines effective development of economy of the society, country, region and enterprise economy.

Keywords : national economy, competition, infrastructure, ICT, info communication, informatization.

The global challenge of the third millennium is in forming of information technological way of production. "The sphere of telecommunications is an important sphere of production and social infrastructure, level of development and work quality of which in many aspects determines reform course, formation and development of market relations in the national economy. Positive tendency meeting today's requirements can be mentioned as accelerated growth of communication services and informatization which increased by 41.6% for a year. It is provided first of all at the expense of increase in subscriber's number, using mobile communication and Internet services that was promoted by taking measures in reporting year on reduction of tariffs for services in providing Internet to population by 22%. Today about 8 million people are active Internet users"[1].

It is impossible to achieve structural transformations of economy without creating developed infrastructure, first of all, information and communication systems, road and transport, engineering and communication construction. The infrastructure of society and its economy are interconnected and interdependent, i.e. development of economy is followed by development of infrastructure which in its turn leads to further development of the economy.

Realizing special and important role of ICT in the economy and society, in 2013 there adopted Comprehensive development program of National information and communication system of the Republic of Uzbekistan for the period of 2013-2020 which continues work on further increase in technical capabilities of Internet access, to hi-tech communication services and informatization which for the last five years increased by 3.3 times, and for reporting 2014 – by 24.5 %. The projects realized within this program allowed to finish transfer of all republic networks to use digital signal in 2014 that considerably increased the speed of international information networks use, and to increase availability of ICT services to the population.

The number of users the Internet which is more than 10.2 million people, or a third of all population is growing today. Thus Internet capacity in the republic increased by 4 times, and access speed – by 1.5 times. Along with it Internet cost in comparison with last year reduced by 11.6%. Nearly 20 million people use mobile communication, this modern hi-tech system, and volume of rendered services increased almost by 26%.

The role of information use in development of economy and significance of information resources available for decision-making is growing.

Because of convergence (interpenetration) of

[1]The global challenge of the third millennium is in forming of information technological way of production. "The sphere of telecommunications is an important sphere of production and social infrastructure, level of development and work quality of which in many aspects determines reform course, formation and development of market relations in the national economy. Positive tendency meeting today's requirements can be mentioned as accelerated growth of communication services and informatization which increased by 41.6% for a year. It is provided first of all at the expense of increase in subscriber's number, using mobile communication and Internet services that was promoted by taking measures in reporting year on reduction of tariffs for services in providing Internet to population by 22%. Today about 8 million people are active Internet users"

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informatics (informatization) and communication (telecommunications) there used unifying term of info communication = information + telecommunications. Thus, term of info communication (or info communication infrastructure) is a modern synonym of information infrastructure.

The information economic law defines interrelation (interdependence) between level of info communication development and the level of the economy development of the society. Society can be understood as a certain region, concrete country, or world community in general. As development of info communication (info communication infrastructure) and development of economy i.e. as information economic law in concrete indicators of development of society is expressed (countries, world) is specifically connected. How specifically connected info communication development (info communication infrastructure) and economy development, i.e. how the information economic law is expressed in concrete indicators of society (countries, world) development.

The state and development of informatization is estimated by private criteria: territoriality, availability, information, info communication development, economic and generalized criteria: complex information and technological, integrated criterion of information society.

The assessment of informatization condition in a section of country territory, sectors of economy, separate organizations, comparison of indicators and characteristics of happening processes with criteria levels serves:

- a basis of forecasts of regional and branch economy development in terms of info communication component;
- definition of actions for intensification of informatization process and priority directions of investing spheres of application info communication technologies, information resources and services.

The methodology of using informatization criteria is necessary for definition the countries development level. Received assessment forms a basis of elaboration forecasts of regional and branch economy development with taking into account info communication components. The assessment of reached informatization level will allow to define actions for intensification of informatization process and priority directions of investment into info communication technologies, information resources and services.

Global challenge of the third millennium on which modern economic science should give the worth answer, is in forming information technological way of production demanding comprehensive judgment and considerable correction of existing scientific methods and approaches. Transitional character of the present period in the history of civilization, global character of this transition period, its technological content, economic forms and social consequences speaking about universal nature of influence is closely connected with considerable changes in structure and mechanisms of functioning modern world economy.

The economic science of the last decades is characterized with basic changes concerning both the subject of its research, and its main methods and approaches.

The material basis of these changes eventually reduced to the formation of information technological way of production which is inevitably leading to sweeping changes in ways of connection of the live and substantiated work and to the statement of elements of new system of the public relations of production.

In the conditions of market economy information plays very important role. Without information it is almost impossible to accept the effective administrative decision which acts in modern conditions as one of the most important factors of functioning and development of the enterprise. Existence of timely and exact information on demand, prices, expenses of the managing director gives huge competitive advantage, so far a just the ratio between the income and expenses of the enterprise defines eventually its financial state, profitability and prospects of development. Formation of the market relations, increase of enterprises independence degree, strengthening of the competition and risk during the work in the market, growth of business scales cause relevance of realization questions management, the income and expenses.

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Demographic situation in Uzbekistan as possibility of development of national economy

Nodir B. Tula
Teacher
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

The paper was intended to discuss demographic situation in the Republic of Uzbekistan. It was analyzed dynamics of gross national product, population employment, economically active population and number of labor resources. It was also shown basic directions of reforms in Uzbekistan, which doesn't inferior to "demographic window of possibilities".

Keywords : demographic situation, economically active population, population employment, manpower, labor market

1 Introduction

The relationship between demography and national economy has became center of discussion among scholars since decades. Demography may contribute to national economy development positively or negatively. Bloom and Williamson (1998) propose that demography may influence growth through the labour force, savings & investment, education enrollment & human capital, and policies. Bloom, Canning and Sevilla (2003) stress that open economies, a flexible labour force and modern institutions assure that a country can actually reap the demographic dividend.

Economic growth for instance will be correlated to the age structure of population. In Europe fr instance, Population ageing is expected to put certain strains on social security expenditures such as pension, health and old-age care expenditures. The decline in the youth dependency ratio had a strong positive effect for the growth rate of output per worker during the 1970s and 1980s (Kelley and Schmidt, 2005; Bloom and Williamson, 1998). Also, Kelley and Schmidt found that human capital (as measured by life expectancy and education) was strongly growth-inducing over periods and regions while financial and political components had more ambiguous impacts.

The aim of this paper was to discuss of demography situation in Uzbekistan and its relationship to the development of national economy.

2 Discussion

For years of independence population of the Republic of Uzbekistan has increased more than 10 million people. It is necessary to note that well-being of our nation has increased for this period as well. President of the Republic of Uzbekistan I. Karimov in his speech devoted to 24thanniversary of Independence of the Republic of Uzbekistan noted that:"Economy of Uzbekistan for years of Independence has grown more than 5,5 times, real income per capita –in 9 times, average life expectancy of people increased from 67 to 73 years, and among women - to 75 years, and undoubtedly such indicators will leave nobody indifferent.

Today our country takes fifth place in the world among the states with rapid developing economy and rates of increase of gross domestic product has made over 8 percent despite continuing world economic crisis for last eleven years, that naturally causes admiration in many people".

In the conditions of modernization of economy development an important factor for national economy is demographic situation in the country. Demographic situation (better than any other sphere of life of society) testifies about its viability, presence of preconditions of sustainable development of the state, level of social comfort and confidence of citizens in future. Therefore studying conditions of demographic situation in the republic gets considerable urgency.

Today Uzbekistan is in relatively favorable conditions from the point of view of the age structure of population. The country entered favorable

period of growth of population number for it and share of most active groups of population –the people who are at working age and women of maternal age. Therefore actual issues are estimation and forecasting influence of demographic processes on economic development of the country, and efficiency of measures in the field of development of human potential in the republic as well.

Analyzing Table 1 it is possible to note that number of economically active population, both in absolute numbers, and in percentage parity rose for researched period from 2009 to 2013. So, in the countries with a high share of economically active population in population structure there is "demographic window of possibilities" that can become an essential factor of economic growth, but only at the effective policy of the state in the education sphere and employment. World practice shows that some countries (for example, "Asian tigers" in 1965-1990) had successfully used demographic possibilities for economic jerk, and some (Latin America during the same period) missed that possibility. Successes of South Korea, Singapore, Taiwan and some other countries are the result of considered policy of use of demographic potential of the country and measures in the field of development of human capital.

Demographic processes make direct impact on social and economic development, in particular, economy development, therefore the problem of definition is most favourable (optimum) flow of these processes and it is maintenance of employment of population, housing development, producing qualitative food, education and public health services.

Basic indicator of demographic situation is number of population. Number of population in the country or separate region renders a great influence on their economic potential, development of productive forces of society. However there is not observed direct dependence between these two concepts. For example, states with high level of economic development at smaller number of population make gross domestic product in ten times more, than the states surpassing them on number of population, but these states yield in technical equipment, labour productivity, level of labour force qualification.

Another not less important indicator of demographic situation is employment level of population. Population employment level in economy depends on dynamics, size and quality (vocational training, health, etc.) labor resources, and from the rates of economic growth, branch and regional possibilities of economy. By efficiency estimation of use of labor force there was a maximum indicator in 2008, that means stripping of growth of labor resources and at existing labour productivity optimum (it is defined as the sum of rates of increase of labor resources and labour productivity) and actual gross domestic product coincided.

So, in 2008 for stripping of growth of labor resources (103%) and at rates of increase of labour productivity to 106 % optimum and actual economic growth in the republic was made by 109 %. Since 2009 efficiency of use of labor resources has decreased slightly and there increased break between optimum and actual rates of increase of gross domestic product. At necessary annual rates of increase of gross domestic product of 109 % and more, actual rates of increase of gross domestic product made more than 108 % (fig. 1).

"Demographic window of possibilities" were used conditions with a view of strengthening economic growth as much as possible that is advantageous from the point of view of age structure of population (gross domestic product increased to 2 times - about 4 % to 8 % a year).

Thus, Uzbekistan is in the conditions of advantageous from the point of view of age structure of population at the present stage of demographic development. The country has entered the period of growth of number of population which is beneficial to it and share of the most active groups of population - people at able-bodied age, women of reproductive age.

Main directions of reforms in Uzbekistan which doesn't yield "demographic window of possibilities" have become: 1) measures on improvement of quality of human capital - reforms in the sphere of education and public health services, 2) expansion of economic possibilities of population, employment policy and effective utilization of labour potential of the country, 3) development of market reforms taking into account specificity of republic and preservation of historical and cultural traditions of local population.

Favorable demographic situation (tendencies of increase in share of able-bodied population at age structure of population and preservation on a low level shares of elderly population) allows to support financial stability of pension system.

Demographic possibilities in the form of increase in number of labor resources, decrease of parasitical load at steady growth of labour productivity have become the important factor of economic growth. The result of these trends became economic jerk with increase in gain of gross domestic product about 4 % in 2003 to 8 % on the average following years.

Modern demographic trends in the republic are more advantageous on the field of worldwide tendencies. First, at scale birth-rate falling and deep depopulation of in the world, in the republic there observed conservative expanded reproduction with annual growth of population to 1.5-1.6 % that is considered as a norm to maintain optimum demographic situation. Secondly, while there observed

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Table 1: Number of economically active population

	2009	2010	2011	2012	2013
	Thousand people				
Economically active population - total	11929,5	12286,6	12541,5	12850,1	13163,0
From total number of economically active population					
Employed in economy	11328,1	11628,4	11919,1	12223,8	12523,3
In percentage of economically active population employed in economy	-	94,6	95,0	95,1	95,1
Economically active in percentage to resident population	-	57,9	58,5	58,6	58,9

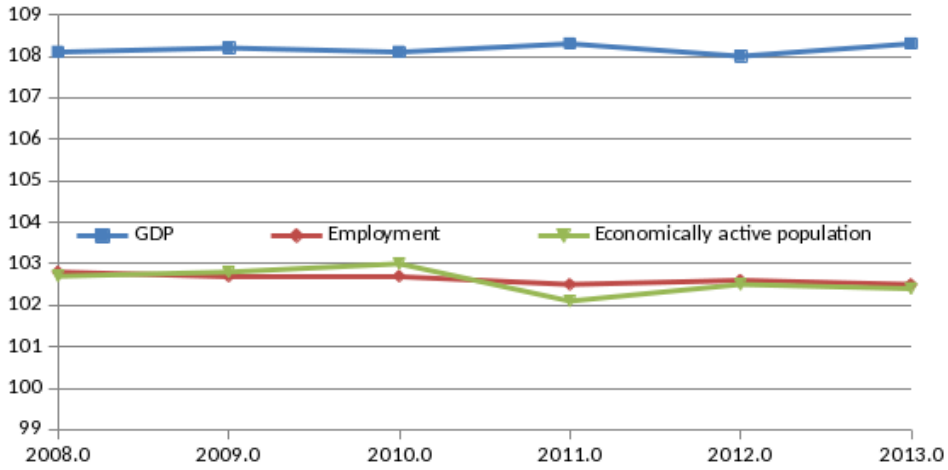

Figure 1: Rates of increase of gross domestic product, employment and economically active population

population ageing in many developed countries of the world, Uzbekistan is only on the threshold of demographic old age. The fact allows supporting financial stability of domestic pension system.

At the same time, labour market modernization is necessary for more effective utilization of labor resources. There required to change some base principles of policy on labour market where transition to policy of effective employment and creation of highly skilled workplaces with worthy salary becomes main vector of changes. At the same time it is necessary to develop the system of preparation and retraining of highly skilled workers and specialists in demand by branches of economy. It is necessary to raise quality of given social services, first of all in education sphere and public health services.

Such approach will allow economy of the republic to create postindustrial society in the long term which is on trajectory of steady and balanced growth, to transfer to innovative model of economic development.

Thus, all plans, programs and indicators of social and economic development of regions and branches, and allocation of financial funds for social sphere are based on demographic indicators. There considered rates of increase of population and their components (birth rate, death rate, age-related structure, migration). All branch and territorial programs, strategy in future should be pledged in close connection with demographic indicators as well.

3 Conclusion

Demographic possibilities in the form of increase in number of labor resources, decrease of parasitical load at steady growth of labour productivity have become the important factor of economic growth. Modern demographic trends in the republic are more advantageous on the field of worldwide tendencies.

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Role and place of centralized investments in innovative development of the economy

Shakhlo R. Abdullaeva
PhD, associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

Investment is one of economic growth trigger. Without investment, economic activities will be delayed. The article discussed the basic directions, forms and types of centralized investments, includes analysis of dynamics changes of main macroeconomic indicators of development of investments and industry in the economy of Uzbekistan.

Keywords :centralized investments, public finance, state budget, special off-budget funds, investment and fixed capital.

1 Introduction

In market economy the role of government as a direct investor remains for base manufactures and social sphere, unattractive for the private capital, and also the branches having important state value. Now in Uzbekistan branches of fuel and energy complex, mechanical engineering, chemical industry, building industry, and also sphere of non-material manufacture, promoting increase of high technology and competitiveness of national economy use special support of the government. In Uzbekistan carrying out active state policy assumes its orientation on revival of investment mechanisms of activity of the enterprises, support of competitive domestic productions, first of all hi-tech, capable to generate competitive advantages on the world market on the basis of state purchasing system, guarantees and programs, formation of the market of effective innovative and investment projects, their joint financing. The objective of this paper was to discuss the role of investment in innovative development of economy as well as discussing centralization of investment.

2 Discussion

In 2014 there implemented 33, 7 bln. UZS of investments at the expense of all sources of financing that was 8, 9 percent more, in comparison with the previous year. The basic growth of implemented investment is covered by own resources of enterprises, direct foreign investment, population finance. The increasing volume of investments into economy, in its turn, is a factor of steady growth of gross domestic product of the country, increasing potential of the state, strengthening its positions in foreign market[1].

The centralized investments are the investments which are carried out within the guidelines of the state investment activity by following instruments:

- Direct financing at the expense of state budget and off-budget funds;
- Attraction of foreign investments and credits under guarantees of the Government of the Republic of Uzbekistan.

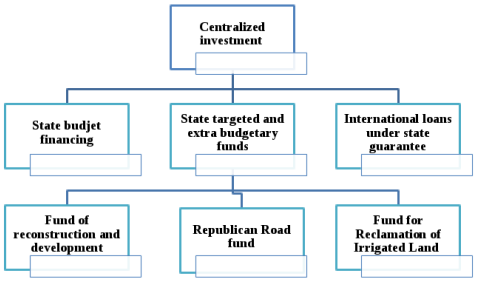

Figure 1: Classification of centralized investment sources in development of basic industries of economy

Management of centralized investments includes definition of objects for the state investments, con-

[1]Islam Karimov. Creating opportunities for the development of private property and private entrepreneurship in 2015 by implementing fundamental structural changes in the economy

ditions of investment and solving other issues connected with them. Management of centralized investments is carried out by public authorities within their competence.

Decisions on realization of centralized investments are made by public authorities on the basis of forecasts of social and economic development, target scientific and technical and complex government programs and feasibility reports defining expediency of these investments. Projects of target complex government programs of nation-wide value are developed and affirmed as an order defined by the Cabinet of Ministries of the Republic of Uzbekistan.

Oliy Majlis of the Republic of Uzbekistan approved of the investment volumes financed from the state budget. Allocation of centralized investments is carried out, as a rule, on the basis of the state contract. State contract is made on the basis of competitive (tender) selection of executor - participant of investment activity. Thus certain privileges can be established by legislation for specified executor.

Investment projects carried out in priority directions of social economic development are included in Investment program of the Republic of Uzbekistan which is adopted by the Cabinet of Ministers of the Republic of Uzbekistan.

Tax and other privileges are given to participants of investment projects implementation included in the Investment program of the Republic of Uzbekistan. The certain list of privileges under each separate investment project or as a whole under the Investment program of the Republic of Uzbekistan is defined in an order established by the legislation. The basic indicators of investment activity development of the country testify to constant escalating of accumulation of fixed capital at the expense of attraction and development of internal and external investments (Table 1).

The norm of accumulation of fixed capital for the last years made 23 % to gross domestic product. For the period of 2000-2013 the volume of investments into national economy increased almost in 4, 3 times with mid-annual growth in 111, 4 %. Thus in separate years growth of investments made 124-134 % that approximately corresponds to average rates of increase in quickly developing countries, for example in China, India. Development of investment activity in the country for the period of 2000-2014 was caused by stage-by-stage realization of measures of investment policy directed on export development and import replacement, creation of new branches and large structure formatting manufactures. It provided a deep diversification of structure of national economy, allowed filling home market with modern qualitative goods of domestic production, considerably to increase total amount of export, including production of complete processing.

Table 1: The basic macroeconomic indicators of development of investments in Uzbekistan for the period of 2000-2014

Indicators	Years					
	2000	2005	2010	2012	2013	2014
Rate of increase of investments into fixed capital, in % to previous year	101	105,7	108,7	112,7	109,8	109,6
Rate of increase of investments into fixed capital, in % by 2000	100	128,1	320,3	389,5	427,7	467,8
Share of centralized investments in total amount, %	55,4	23,9	16,7	20,1	22,2	22,1
Share of not centralized investments in total amount, %	44,6	76,1	83,3	79,9	77,8	77,9

State investments were mainly directed on financing construction of social infrastructure objects that finally reflected in high indicators of social development of the country, especially on dynamics of development of rural areas.

For the period of 2000-2014 level of diversification of the industry considerably raised. The share of the added cost in industrial output grew from 24, 5 % in 2000 and from 38, 4 % in 2008 to 47, 1 % in 2013 the increase in level of diversification of the industry was influenced as a whole by growth of the given indicator in electric power industry, fuel industry, black and nonferrous metallurgy, mechanical engineering, the industry of building materials, food-processing industry.

3 Conclusion

Increasing level of industry diversification support to extend number of the goods and create of new ready goods production in a number of industries. In process of development of national economy, strengthening of its market bases, growth of investments was increasingly provided at the expense of increase in investment activity of enterprises and population, creation of new investment institutes,

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such as commercial banks and extra-budget funds, attraction of foreign investments. One of actual directions of increase in efficiency of centralized investments in economy key economic branches is development of public-private partnership.

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About Mathematical Models Construction

Shamsuddin R. Settiev
PhD, associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

The paper discussed the ways of mathematical models construction in economy and natural sciences. There made comparative analysis according to common scheme of modeling process. There showed problems which can appeared in modeling in natural sciences and methods of their solution.

Keywords : mathematical model, formalization, numerical solution, adequacy, models, similarity of phenomenon, transitional scales

1 Introduction

Generally, economic problems are solved by deploy mathematical model. Mathematical model is a representation of a system. Mathematics is an integral part of economics. It plays a basic role in creating ideas, constructing new theories, and empirically testing ideas and theories. Economic models have two functions. First function is as a simplification of and abstraction from observed data, and second as a means of selection of data based on a paradigm of econometric study. Learning how to construct mathematical model for economic problems is important and interesting as well.

In this work there considered mathematical models constructions in economic and natural sciences. In addition, it was also provided comparative analysis.

2 Discussion

General scheme of the process of economic and mathematical modeling is the following:

1. Task statement
2. Formalization
3. Decisions
4. Adequacy checking

Adequacy checking step is required to decide go further or should return to the beginning.

The tasks are the following at statement stage:

- The object of the research is determined.
- The purpose of the research is formulated, there determined characteristics of a system which should display constructed model.

At formalization stage:

- There conducted the analysis of the object of the research, its basic structural and functional elements are determined. The most essential characteristics of these elements influencing on achievement of set object of modeling(there determined degree of model completeness) are revealed. Characteristics of the system are divided into model parameters (characteristics which should be known for model construction) and variable models which should be specified as a result of modeling.
- Symbolical designations of used values are entered.
- There produced mathematical description of interrelations between elements and characteristics of system âĂŞthere constructed economic and mathematical model.

At solution stage there chosen method of carrying out calculations depending on modeling purpose and structure of mathematical model and task solution is performed.

Three types of solution are often considered:

- Exact or analytical. But it is not always succeeded. In such solution the result is given in the form of ready formulas. We receive solution at assigning necessary values of parameters of considered process. Accuracy of received solutions is determined by accuracy of computation of these formulas on values of set parameters.

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- Approached solution turns out with some error which cannot be eliminated up to the end. Graphical solution is an example of approached method of solution. Other approached methods can be based on simplification of model equations at the expense of rejection of small members or decomposition of functions in numbers on degrees of small parameter with preserving limited number of members of a row of number (linearization in which there remained only first member of expansion so that the task became linear). Often after linearization of obtained equations it turns out into analytical (assumptions is confidant accounting above mentioned solutions).

- Numerical solution is usually conducted by means of computer. In such solution the results look like not formula, but numbers or the table of numbers received as a result of accomplishment of computer program constituted (by author). Such solution is calculated with a margin error of applied numerical method (for example: differential schemes, final elements, iterative methods etc.) which can be specified by mathematical way. In such cases error order is determined in the form of ten degrees minus aâĂŞ where there is natural number.

There should not necessary to confuse accuracy of solution to accuracy of model as a whole. Accuracy of model is mainly determined its completeness. Even having exact decisions of equations model accuracy can be insufficient.

Analytical decision of model equations is preferable as formulas written obviously down of solution allow analyzing easily degree and character of influence of separate parameters on system behavior, to reveal possibility of crisis situations (function expressing solution can have rupture, break or excess in such critical points). However, analytical solution is possible in rare cases. It is more possible to receive numerical solution. Nevertheless its analysis is more complicated. For determination of system behavior in different situations it is necessary to carry out calculation again each time, performing so-called machine experiment.

Checking mathematical models adequacy is usually performed by comparison of results of modeling with characteristics of real system. For this purpose it is better to try applying model of already existing system with known characteristics.

Such method of checking is rarely possible to use in practice for economic and mathematical models (basically for macroeconomic models).A model is often supposed as adequate just on the basis of the fact that there are more or less authentic hypotheses in its basis(suggested on the basis of studying systems and situations which happened in the past) and more or less precisely determined parameters. Checking the adequacy of such model is performed after the event âĂŞaccording to the results of subsequent functioning of modeled system. If it appears that model was inadequate to current situation and concrete economic solutions have been made on its basis it can be fraught for system as more or less considerable crisis.

Therefore a stage of task statement is especially important in economic and mathematical modeling. If at this stage there suggested incorrect assumptions about system character and processes occurring in it - the result can be irreversible.

Thus, modeling in economy is complicated activity integrated to certain risks. Nevertheless, during the analysis of various economic systems there accumulated a considerable experience of construction of economic and mathematical models which have proved the adequacy in many situations.

In natural sciences modeling is a replacement of studying phenomenon in kind and which is interesting for us to the model of smaller or bigger scale usually in special laboratories. The main objective of modeling is in the fact that it is possible to give necessary answers about character of effects and various values connected with the phenomena in natural conditions according to the results of experiences with the model.

Modeling is based on consideration of physically similar phenomena in majority of cases. We replace studying natural phenomenon interesting for us to studying physically similar phenomenon which is more convenient and favorable to perform. Two phenomena are similar, if according to set characteristics of one it is possible to receive characteristics of another by simple recalculation which is similar to transition from one system of measure units to another. ThatâĂŹs why it is necessary to know âĂIJtransitive scalesâĂİ.

It is possible to consider numerical characteristics for two various, but similar phenomena as numerical characteristics of same phenomenon expressed in two various systems of measure units. It is necessary to meet conditions to preserve similarity in modeling. However these conditions which provide similarity of phenomena as a whole are not always carried out, and then there is a question on errors values (scale effect) which arise at carrying over nature of results of obtained model. In such cases the following theorem is used:

It is necessary and sufficient for similarity of two phenomena to be identical in these two phenomena for numerical values of dimensionless combinations forming the base.

If similarity conditions are executed, it is necessary to know transitive scales of all corresponding sizes for actual calculation of all characteristics in kind according to data about dimensional model characteristics. If the phenomena are determined by n parameters in which k has independent di-

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mensions then transitive scales can be arbitrary for values with independent dimensions and they need to be set taking into account statements of problem and conditions of experiences in experiments.

he research by means of models is often unique method of experimental studying and solution of major practical tasks. That's about the size of studying natural phenomena proceeding in current tens, hundreds or even thousand years; in the conditions of modeling experiences the similar phenomenon can proceed some hours or days. There can be return cases when it is possible to study phenomenon that id similar to it occurring on model much more slowly instead of researching phenomenon proceeding in nature extremely quickly.

On first stage of mathematical modeling of natural phenomena it is considered accomplishment of fundamental laws of physics, i.e., laws of preserving weight, energy, impulse, laws of thermodynamics etc. Besides basic equation of movement turns out from Newton's second law where acceleration is considered as change of time speed:

$$m\frac{\overrightarrow{d\vartheta}}{dt} = \overrightarrow{F}\, m\frac{\overrightarrow{d\vartheta}}{dt} = \overrightarrow{F} \tag{1}$$

Where $\overrightarrow{F}$ sum of all acting forces. For example, at studying current of viscous liquid in channel, ground force, resistance force of bottom and side boundaries are operated on liquid gravity, liquid atmospheric pressure and force capillary tension acts on free surface. In this equation current speed $\overrightarrow{\vartheta}$, pressure $\overrightarrow{p}$ is variables. If there studied three-dimensional liquid currents in channel then vector value speed and pressure have three components. Thus, if we write formed equations in projections to axes of co-ordinates quantity of equations there be equal to three, and unknown to six.

In construction of mathematical models of natural phenomena in formalization stage there formed a system of differential (equations in private derivatives) equations where the quantity of variables exceeds quantity of equations in times. It is possible to refer a system of Reynolds equations to such equations (where there studied turbulence models), equations of hydrodynamics, gas dynamics, hydraulics etc. And it leads to in solvability of equations system. In order to balance quantity of variables to quantity of equations in a system, it is introduced additional assumption which often leads to decrease in adequacy of model. For example assumption about liquids in compressibility

$$\frac{dp}{dt} = 0\frac{dp}{dt} = 0 \tag{2}$$

density does not change due to course, borders of channel are firm and impervious, isotropy of environments (property of environment is equal to all directions) and barotropy(existence of analytical dependence pressure from density) etc.

3 Conclusion

Modeling is responsible scientific task having general basic and informative value, but it is necessary to consider it only as initial base of main task which consists of actual determination of laws of nature, in finding general properties and characteristics of various classes of phenomena, development of experimental and theoretical methods of research and permission of various problems, at last, in reception of regular materials, acceptances, rules and recommendations for solution of concrete practical tasks.

Further we would like to tell why boundary and initial condition is introduced (why they are necessary). About analytical and numerical solutions received at modeling of natural phenomenon.

Transition from numerical solutions and their comparisons with experimental, natural data. About accuracy of numerical decisions. About convergence and stability of applied numerical methods etc.

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Regional Economic Integration of ASEAN Countries

Shavkat K. Djamalov
Applicant
Tashkent Branch of Russian Economic
University after G.V. Plekhanov
Republic of Uzbekistan

Abstract

Development of international economic integration is a natural consequence of internationalization of production in conditions of development of productive forces and scientific and technical progress. At the present stage the expansion of integration groups and transition to new forms of cooperation is occurring in conditions of globalization of the world economy when borders of business are erased everywhere and economic interdependence of the states amplifies. The paper was intended to discuss economic integration among ASEAN countries.
Keywords : integration, ASEAN countries, internationalization, cooperation, development

1 Introduction

The Association of Southeast Asian Nations (ASEAN) Economic Community (AEC) has been started to implementation in 2015. AEC envision as a single common market and production base, which leads to the freer flow of goods, services, investment capital and skilled labour in ASEAN region. Tariffs and non-tariff barriers are reduced, which implies for intraregional trade and investment. New opportunities for growth and prosperity are likely to emerge, but the challenge is to ensure that growth is inclusive and prosperity is shared.

Today the ASEAN, with its population which approximates to 600 million people, with a total gross domestic product of 1.5 trillion US dollars, a foreign trade turnover of 2.04 trillion US dollars and stable rates of economic growth, is one of the largest regional organizations. The 81.0% of world production of natural rubber is the share of the countries of Association, 90% of palm-oil, 53.0% of coconut oil, 62.0% of tin, 60.0% of copper ore, 12.0% of chrome ore. They possess considerable stocks of oil and natural gas.

The analysis of the relations of ASEAN with the main trade and economic partners and the international economic organizations shows that the countries of the Association are deeply and intensively included in the international division of labor. The 60.0% of volume of foreign trade of ASEAN is the share of the main economic centers of the world economy - the USA, the European Union and Japan. It testifies considerable and proportional involvement of this regional organization in world economic relations. This study discussed the implications of the regional initiatives on ASEAN Member States and how Uzbekistan can gain benefit from this community.

2 Discussion

The president of the Republic of Uzbekistan I.A. Karimov, speaking about strategic objectives of political and economic strengthening of the country, emphasized: "This is an entry into the number of the modern developed democratic states, using all the natural resources, our rich production and intellectual potential, relying thus on cooperation with the international community"[1].

Globalization strengthens the international competition, which demands from the states the application of a maximum of efforts to take a worthy place in the system of the world economy on the basis of the international division of labor. In these conditions the states use regional economic integration as a way of formation of new, stronger and competitive economic units in the world market - integration blocks on the basis of association of economies of a number of the countries.

Presently, there are more than 40 integration associations with participation of more than 120 countries, which differ in depth and nature of the chosen integration strategy and the institutional structure, sphere and ranges of activity, number of the participating countries.

As a result of regional integration on mutually advantageous conditions, processes of economic and social development of the countries are synchronized, values of macroeconomic indicators of development approach, interdependence of economies goes deep, gross domestic product and

[1] Narodnoeslovo, September 1, 2011

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labor productivity grows, there is growth of scales of production, reduction of expenses, regional trade markets are formed.

Regional integration processes are defined not only by internal regional factors, but also by growing requirements of the external environment under the influence of globalization, the more and more amplifying international competition. Today the ideology of the international economic integration itself is changing - the regional organizations, which were previously concentrating on rapprochement of national economy of the participating countries, become players on global economic space, and integration increasingly means integration of the region in the world economy.

One of the most successful groups in the developing world is the Association of Southeast Asian Nations – ASEAN created in 1967, initially composed of Singapore, Thailand, Philippines, Indonesia and Malaysia. In 1984 Brunei joined this regional organization, in 1995 – Vietnam, in 1997 – Laos and Myanmar, in 1999 – Cambodia. In such a way, now there are 10 member states in ASEAN. Papua New Guinea and East Timor have the status of the observer. Now the question of admission of East Timor in full membership of the Association is being considered.

Creation of ASEAN in the mid-sixties of the XX century was caused, first of all, by need of ensuring military-political stabilization for Southeast Asia. Since the beginning of its existence the most considerable agreements were concluded by member countries in the field of political cooperation and cooperation in the area of safety. Taking into account problems and internal contradictions between these countries, many analysts expressed at that time big doubts concerning its stability and prospects for the future.

Defying these forecasts, ASEAN, for rather short time, showed considerable efficiency which was especially shown in the sphere of economic development. Steps towards mitigation of political and territorial disputes within the formed out regional community allowed the countries of the region to provide necessary political stability, and correctly chosen model of export oriented economic development, relatively low cost of labor and other factors made their economy attractive to foreign investments.

In their practical activities, the countries of ASEAN especially stimulate the sphere of economy where cooperation extends on trade, customs affairs, standards, investments, as well as agricultural and forest sector, environment, science, technology and social development. Integration capacity of ASEAN shows a steady tendency to growth on the basis of the use of advantages within regional cooperation and deepening of economic relations with the neighboring countries.

In the last decade, ASEAN undertakes the actions someway or other connected with aspiration to meet the challenges of globalization and to strengthen own positions in the world economy. Great significance ASEAN attaches to use of information technologies in all spheres of economic cooperation, thus, bringing it to the most modern technological level and opening ample opportunities for initiatives of the private sector.

Outstanding characteristics of economic integration of ASEAN countries is that in conditions of universal decrease of customs tariffs the advantages of the free trade zone for the participating countries decrease, and industrial cooperation more and more passes into an area of initiatives of the private sector. Such spheres, as liberalization of trade in services, development of transport and information infrastructure, customs cooperation, improvement of investment climate, unification of standards, and development of tourism become new priorities of economic cooperation according to the purpose of increasing the global competitiveness of the Association.

In the short term the economic integration of ASEAN will be aimed at the development of post-industrial economy, attraction of investments, development of the general information, transport and power network and alignment of the level of development of economies of the participating countries. The cooperation of ASEAN with China, Japan and South Korea, which has already begun, has high integration potential, in particular, is a real possibility of creation of Asian currency fund and the East Asian free trade zone.

Strategy and tactics of the foreign economic policy of the Republic of Uzbekistan is based on the principles developed by the President Islam Karimov. It is, first of all, development of trade and economic relations regardless of ideology, equal and mutually beneficial cooperation, priority of the norms of international law, reasonable balance between competition and cooperation, creation of the most favored nation treatment for the countries and foreign investors, which provides attraction of the most modern technologies.

One of the bases of the foreign trade policy of Uzbekistan is development and implementation of an integral program aimed at the increase of competitiveness of national economy, development and expansion of the export potential of the country. The goal of the program is to ensure conditions for the steady growth of volumes of export and improvement of its structure on the basis of the maximum use and development of available resource and production potential.

The Republic of Uzbekistan established foreign economic relations with 180 countries of the world. Uzbekistan provides the most favored nation treatment to 38 countries with which there have been signed intergovernmental agreements on trade and economic cooperation, including with Indonesia, Vietnam. Goods from the countries with which the Republic of Uzbekistan signed the Agreement on

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creation of a free trade zone, are not liable to import customs duties.

Mutually beneficial cooperation of Uzbekistan is extending and deepening with the Association of Southeast Asian Nations, and also with the members of this regional integration organization. Uzbekistan was the first of the countries of Central Asia, to appoint its ambassador to ASEAN in 2011. Especially close cooperation has been established with Singapore, Malaysia, Indonesia, Vietnam and other countries of ASEAN.

Acceleration and expansion of scales of modernization, technical and technological renewal of economy and its leading branches, diversification of production are the priority strategic directions of the development of national economy of Uzbekistan. The free industrial economic zone "Navoi" and the special industrial zone "Angren" have been created for this purpose; such zone is being formed in Djizak as well.

3 Conclusion

It is known, the countries of ASEAN have gained a wide experience in creation of free economic zones, in attraction of investments into the branches of economy, industrialization of economy and development of import-substituting production. Further development and deepening of mutually beneficial cooperation of Uzbekistan with the countries of the Association of Southeast Asian Nations, undoubtedly, will promote the successful solution of strategic objectives of modernization and diversification of national economy, increase of its competitiveness.

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Sharp Bounds for the Gini Coefficient

ShoturgunSh. Sharakhmetov
Doctor of physical and mathematical sciences, professor
Tashkent State University of Economics, Republic of Uzbekistan

ShukhratA. Ismatullaev
PhD associate professor

Tashkent Branch of Russian Economic University after G.V. Plekhanov, Republic of Uzbekistan

Abstract

The Gini coefficient (also known as the Gini index or Gini ratio) is a measure of statistical dispersion intended to represent the income distribution of a nation's residents, and is the most commonly used measure of inequality. This number helps define the gap between the rich and the poor, with 0 representing perfect equality and 1 representing perfect inequality. The objective of the paper was to evaluate the implementation of Sharp bounds for the Gini coefficient. It showed that Sharp bounds for the Gini coefficient of two samples in general and discrete cases are proved.

Keywords : sharp bounds , the Gini coefficient, measures of inequality, the mean difference, Lagrange method, Lagrange function.

1 Introduction

Let X and Y be two independent identically distributed (i.i.d.) random variables (r.v.'s). The mean difference $\triangle = E|X-Y|$ introduced by C. Gini [1] has a considerable interest as a quality that characterizes dispersion of two samples with respect to each other. The normalized version of mean difference $G = \frac{\triangle}{2m}$, where $m = EX = EY$, is widely used in research in economics and statistics as a measure of inequality (usually referred to as the Gini coefficient). Robust inference on the Gini coefficient and other commonly used measures of inequality is a well-known problem in above fields, in part because of large sensitivity of their estimators and sample analogues to extremes and outliers in data. Therefore, in particular, the problem of obtaining sharp bounds on the Gini coefficient and other inequality measures has a significant interest in economic and statistical research and related fields ([2],[3]). The purpose of this work is to provide some of such sharp bounds in the general and discrete case.

$$sup_F \frac{\iint\limits_{-\infty}^{\infty} |x-y|\, dF(x)\, dF(y)}{\sqrt{\int\limits_{-\infty}^{\infty} x^2 dF(F) - \left(\int\limits_{-\infty}^{\infty} x dF(x)\right)^2}} = 2\frac{\sqrt{3}}{3} \tag{1}$$

where the sup is taken over all cdf's F such that $\int\limits_{-\infty}^{\infty} x^2 dF(F) <$. Further, the sup is achieved for the cdf F that is uniform on the interval $[0,1]$. Theorem 2 (discrete case). One has

$$Sup\frac{E|X-Y|}{\sqrt{DX}} = \frac{2}{3}\sqrt{3\left(1-\frac{1}{n^2}\right)} \tag{2}$$

where the sup is taken over all i.i.d. discrete r.v.'s and taking n values and such that $DX = DY < \infty$.

Corollary. For $\gamma_n = Sup\frac{E|X-Y|}{\sqrt{DX}}$ the following statements are fulfilled:

1. $\gamma_2 = 1, \gamma_3 = \frac{4}{9}\sqrt{6}, \gamma_4 = \frac{\sqrt{5}}{2}, \ldots$
2. $1 \leq \gamma_n < \frac{2}{3}\sqrt{3},$
3. $\gamma_n < \gamma_{n+1}, \gamma_n \uparrow \frac{2}{3}\sqrt{3}$

The following lemma takes central place in the proof of these main results of the paper.

Lemma.Let $n \geq$. One has
$sup\frac{E|X-Y|}{\sqrt{D}} = \frac{2}{3}\sqrt{3\left(1-\frac{1}{n^2}\right)}$

where the sup is taken over all i.i.d. r.v.'s X and Y taking n values and such that $EX = EY = m$ and $Var(X) = Var(Y) = D$. Further, the sup is achieved for the i.i.d. r.v.'s X and Y with the distribution

$P\left(X = \frac{\sqrt{3D}}{\sqrt{n^2-1}}(2k-(n+1)+m) = \frac{1}{n}, k = 1,2,\ldots,n\right)$

Prof. Let $P(X=a_k) = P(Y=a_k) = p_k, k = 1,2,\ldots,n$. Denote $\triangle(a,p) = E|X-Y|$.We suppose (without loss of generality) that $a_1 < a_2 < \ldots < a_n$. It is clear that

$\triangle(a,p) = \sum_{1\le i,j\le n} |a_j - a_i|\, p_i p_j = 2\sum_{1\le i,j\le n} (a_j - a_i)\, p_i p_j$

Taking in the account the equality $a_j - a_i = \sum_{k=i}^{j-1} (a_{k+1} - a_k)$, we will get the following representation:

$\triangle(a,p) = \sum_{k=1}^{n-1} (a_{k+1} - a_k)\, a_k$, where $a_k = 2\sum_{i=1}^{k} p_i \sum_{j=k+1}^{n} p_j$

Further part of proof consists of two steps: on the first step for arbitrary $p_1, \ldots, p_n$we will find

$\triangle(p) = max\, a \sum_{k=1}^{n-1} (a_{k+1} - a_k)\, a_k$

where max is taken over all $a_1, \ldots, a_n$, for witch the conditions

$\sum_{i=1}^{n} a_i p_i = m,\ \sum_{i=1}^{n} a_i^2 p_i = d$

are fulfilled. Then on the second step we will find

$\triangle_n = max\, p\triangle(p)$

over all $p_1 > 0, \ldots, p_n > 0$, such that $p_1 + \ldots + P_n = 1$

Both problems will be solved by Lagrange method. Consider Lagrange function

$L(a,p) = \sum_{k=1}^{n-1} (a_{k+1} - a_k)\, a_k - \lambda_1 \left(\sum_{i=1}^{n} a_i p_i - m\right) - \lambda_2 \left(\sum_{i=1}^{n} a_i^2 p_i - d\right)$

and find stationary points as the roots of the following system of equations

$\frac{\vartheta L(a,p)}{\vartheta a_1} = -a - \lambda_1 p_1 - 2\lambda_2 a_1 p_1 = 0,$

$\frac{\vartheta L(a,p)}{\vartheta a_1} = a_{k-1} - a_k - \lambda_1 p_1 - 2\lambda_2 a_k - p_k = 0,\ k = 2, \ldots, n-1, 2,$

$\frac{\vartheta L(a,p)}{\vartheta a_1} = a_{n-1} - \lambda_1 p_1 - 2\lambda_2 a_n p_n = 0,$

$\frac{\vartheta L(a,p)}{\vartheta a_1} = m - \sum_{i=1}^{n} a_i p_i = 0,$

$\frac{\vartheta L(a,p)}{\vartheta a_1} = d - \sum_{i=1}^{n} a_i^2 p_i = 0.$

It follows from this that

$0 = \sum_{k=1}^{n} \frac{\vartheta L(a,p)}{\vartheta a_k} = -a_1 + \sum_{k=2}^{n-1} (a_{k-1} - a_k) + a_{k-1} - \lambda_1 \sum_{k=1}^{n} p_k - 2\lambda_2 \sum_{k=1}^{n} a_k p_k = 0 - \lambda_1 - 2\lambda_2 m,$

$0 = \sum_{k=1}^{n} \frac{\vartheta L(a,p)}{\vartheta a_k} = \sum_{k=1}^{n} (a_{k+1} - a_k)\, a_k - \lambda_1 \sum_{k=1}^{n} a_k p_k - \lambda_2 \sum_{k=1}^{n} a_k^2 p_k = \Delta(p) - \lambda_1 m - \lambda_2 d.$

for finding $\Delta_n = max\, p\Delta(p)$, we will use the Lagrange method once more: consider Lagrange function

$$L(p) = \sum_{k=1}^{n-1} (p_{k+1} - p_k)\, a_k - \lambda_3 \left(\sum_{k=1}^{n-1} p_i - 1\right) \quad (3)$$

and after similar computation we will get

$\lambda_2 = \sqrt{\frac{n^2-1}{3Dn^2}}$,

$\Delta_n = 2\frac{\sqrt{3}}{3}\sqrt{D\left(1 - \frac{1}{n^2}\right)}$,

$a_k = \sqrt{\frac{3D}{n^2-1}}(2k - n - 1) + m.$

Thus, lemma is proved.

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Modern Global Tendencies of Stock Market Development

Zakhida. Fayziev
PhD, Associate Professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov
Republic of Uzbekistan

Abstract

Progressive growth scales of world equity market is provided under influence of modern worldwide tendencies among which there is reduction of the share of commercial banks in financial assets and the growth of the share intuitions of equity market and institutional investors; substantial change of the structure of financial tools of the market for benefit of real sector; strengthening interrelation between financial and real sectors of economy; further concentration and realization of funds; the process of securitization; rise of the role and importance of individual investors in equity market; globalization and internationalization of equity market.

Keywords : Centralization, Concentration of funds, financial tools, stock market, globalization of equity market, individual investors, institutional investors, securitization

1 Introduction

The world trend consists of reducing share of commercial banks in financial assets and growth of the share of security institutions and institutional investors, reducing their role in redistribution of financial resources and simultaneous increase in the share of funds distributed through the stock market, on the basis of contractual and collective savings with the use of its tools.

In developed countries, funding costs by issuing securities received preferential development in comparison with the bank loan. At the same time the share of non-bank credit institutions in the structure of institutional investors, particularly investment funds is rapidly growing. Simplification of access to the security market, its growth of liquidity led to a partial loss of banks their role as a mediator and main creditor. In the context of ever-increasing competition, banks are forced to reconsider their place in financial system, restructure and strengthen investment direction of their activities on the fundamentally new basis.

The objective of the paper was to discuss modern global tendencies of stock market development.

2 Discussion

Despite the apparent strengthening of the role of security market, two of the financial mechanism of economic growth - through the securities market and by means of a bank loan should not be opposed. The best seems to establish a kind of "division of labor" between them: securities market should be a major source of investment for the purpose of renewal of fixed capital, expansion of production; bank credit can serve as a support mechanism for stabilization of cash flows. Rational correlation, the balance between these two competing mechanisms will not be established immediately–it is a long-term multi factorial process.

One of the key developments became a significant change in the structure of outstanding financial instruments of the market in favor of the instruments of the real sector - corporate securities and their derivatives financial instruments. The result is a steady increase in both absolute and relative terms, the sector of corporate securities (shares and bonds).

There intensify link between financial and real sectors of economy. This trend is stimulated by natural intention for super-profits, exceeding the average rate of profit by reducing the cost of production, higher quality and novelty goods.

It works to improve the rate and yield of securities of corporationsand leaders, as a reflection of the degree of efficiency and profitability. The appearance on the market of securities always causes increased interest of large number of investors interested in placing their funds.

Outwardly, this trend is reflected in the fact that industrial companies (newly established) issue securities (shares and bonds) which has become the primary means of mobilizing investment resources. In its turn, mechanism of financial market provides

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redistribution of funds in favor of the most promising companies that stimulate structural changes in the economy.

Characteristic feature of the present stage of development of security market is further concentration and centralization of capital. The trend towards concentration and centralization of capital has two aspects in relation to the security market:

- Security market involves all new members and this activity becomes a major, professional;
- The process of allocating major leading market professionals on the basis of increasing their own capital (capital concentration) and their fusion into larger structures of security market (the centralization of capital)which is in progress;

A clear illustration of the last statement is the process of concentration of stock exchange, which took place last decade. The result was total reduction of their number.

There rapidly grow global scale of computerization and technological modernization of financial markets on the basis of modern electronic technology. Computerization has become the basis of the key innovations in the securitymarket (new tools, trading systems, infrastructure).

One of the key trends ofsecurity market development at the present stage is associated with the process of securitization. Securitization makes transition of monetary fundsfrom its traditional forms (savings, cash, deposits, etc.) into the form of securities, which facilitate transformation of increasing masses of capital in the form of securities, transformation of one form of securities in other, more accessible to a wide circle investors.Reasons for securitization related, on the one hand, to increasing concentration and centralization of production and capital and increased the role of large companies in financial and real sectors of economy, and on the other - with the objective need to increase liquidity of financial instruments in the context of liberalization and internationalization of financial markets and solving problems cash flow management, which the bank credit is not always able to cope.

As a result of securitization in industrialized countries in the conditions of equilibrium of economy a significant portion of available capital is invested directly in the purchase of securities. There observed tendency to modificationforms of savings in the last decades of the last century even in unstable economic environment.

Significant trend is increasing role and importance of individual investors in the securities market. In recent years, a wide range of individual spots in the operations of securities market and possibility of profitable enough to secure placement of their savings, despite some risk factors.

However, it is not only the direct (immediate) investors investing in securities of various companies, but also the indirect investment through a variety of forms of collective investment operating in industrialized countries.

The reliability of securities market and degree of credibility is increasing. Securities market, as well as the entire economy, it is not immune to downturns, crises and other shocks. Moreover, it was the collapse of securities market can serve as an omen of total financial disaster in the state. It is logical that securities markets in many countries have been the object of government regulation.

Reliability of securities market and degree of credibility on the part of investor's mass is directly related to an increase in the level of organization of the market, the action mechanism of self-regulation and increased government control over it. The scope and value of securities market today is such that it leads to the destruction of the right strain of economic development, the process of reproduction in general.

The state cannot afford itself that trust in this market would beshaken, and masses of people who have invested their savings in securities of the country, or any other, who suddenly lost them as a result of any fraud or upheavals. Therefore, all participants in the securities market are directly interested that it was properly organized and tightly controlled by the most important of his party - state.

However, there is another significant reason for this process - fiscal. Increased degree of organization of the market and control it allows each State to increase its tax base and amount of tax revenue from market participants. At the same time the possibility for overlap "launder" money obtained from illegal businesses and theft.

The most important trend in the development of securities market is its internationalization and globalization. Internationalization of the securities market means that national capital transcends countries, which leads to the formation of global securities market in relation to which national markets are minor.

Investors from any country can invest their surplus funds in securities traded in other countries. Thanks to the computerization of the development of modern means of communication and the use of internet technology stock market takes a global, when national markets are considered as part of a single global securities market.

Globalization of security market as a process of erasing the boundaries between national markets; building a global trading platform, consisting of financial markets in different countries, working in different time zones;integration of financial instruments, market participants, regulators, mechanisms for security transactions - all the key trends in the development of security markets in the last

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decade of XX century and the beginning of XXI century.

3 Conclusion

There is a progressive increase in the scale of global security market.Growth of its market capitalization, although the degree of participation in this process developed and developing countries are different and is determined by the specifics of supply and demand factors. Foreign experience shows that the role of security market as a mechanism for accumulation and redistribution of capital in the investment process in modern conditions is increasing.

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Development of Investment Activity in the Republic of Uzbekistan and its Legal Regulation

Elena G. Arkhangelskaya
PhD, associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

In the article there considered urgent issues of legal regulation and development of investment activity in the Republic of Uzbekistan, realisation of investment program. There also noted state guarantees on protection of the rights and legitimate interests of foreign investors who are carrying out investment activity on the territory of the Republic of Uzbekistan.

Keywords : investments, investment policy, investment climate, social and economic policy, guarantees of investor's rights.

1 Introduction

In Uzbekistan there actively carried out practical realization of the investment policy directed on modernization, technical and technological updating of economy branches, acceleration of introduction of strategic investment projects and creation of new industrial objects.

Despite negative consequences of financial and economic crisis for many countries of the world, in Uzbekistan it was possible to provide balanced and sustainable development of economy. The decision of these problems became possible as a result of the conditions created in Uzbekistan: first of all thanks to social and economic policy based on five basic principles of reforming, offered by the President of Uzbekistan Islam Karimov and recognized in the world as "Uzbek model" reform. Also it is necessary to consider key factors of success of business conducting in Uzbekistan: presence of rich raw-material base, favorable geographical position of the country in the centre of largest regional markets, presence of industrial base developed transport -logistical system, personnel scientific potential of the republic.

Thanks to consecutive and purposeful realisation of evolutionary and stage-by-stage strategy of reforming and development in Uzbekistan there provided preservation of macroeconomic stability and steady high growth of economy.

2 Discussion

As it has been noted by the President of the Republic of Uzbekistan in the report at solemn meeting devoted to the celebration of 24th anniversary of independence of the Republic of Uzbekistan, "economy of Uzbekistan for years of independence has grown more than 5,5 times, real incomes per capita - 9 times.

Today Uzbekistan takes the fifth place in the world among the states with speed up developing economy for last 11 years, despite proceeding world economic crisis, growth rates of gross domestic product make over 8% that, naturally causes admiration among many people".[Karimov, 2015]

For the years of independence in the Republic of Uzbekistan there created favorable investment climate. In the country there developed complete system of measures on stimulation of activity of enterprises with foreign investments on the basis of current legislation. The legislation on investments is guarantees and protects the rights of foreign investors who are carrying out investment activity on the territory of the Republic of Uzbekistan.

Discrimination concerning foreign investors is not supposed in connection with their citizenship, residence, religion, economic activity venue, and also depending on the country of origin of investors or investments taking into account maintenance of realisation of international contracts of the Republic of Uzbekistan. Legislation certificates, including departmental statutory acts, have no retroactive effect in cases if their execution causes damage to the foreign investor or foreign investments.

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In case if subsequent legislation of the Republic of Uzbekistan worsens the investment conditions, then to foreign investors within ten years from the moment of investment the legislation is operating for the date of investment is applied. The foreign investor has the right to apply at own discretion those positions of new legislation which improve conditions of its investment [Karimov, 2014]. Foreign investments and other assets of foreign investors into the Republic of Uzbekistan are not subject to nationalisation.

Basis of legal regulation in the field of attraction of foreign investments in the Republic of Uzbekistan are: Law "On foreign investments" from 30.04.1998 (operates in new edition of 2014), Law "On investment activity" from 24.12.1998, Law "On guarantees and measures of protection of the rights of foreign investors" from 30.04.1998, (operates in new edition of 2014), Law "On protection of private property and guarantees of the rights of proprietors" from 24.09.2012 (operates in new edition of 2015), Law "On foreign trade activity" from 14.06.1991 (in new edition of 2015), Law "On free economic zones" from 25.04.1996 (in edition of 2015).

Number of decrees of the President and the Republic Uzbekistan governmental orders of Republic of Uzbekistan are adopted in the Republic. In particular, there adopted Decree of the President of the Republic of Uzbekistan "On measures on maintenance of reliable protection of private property, small-scale business and private business, removal of barriers to their accelerated development" from 15.05.2015, Decision of President of the Republic of Uzbekistan from 28.04.2015 "On measures on increase in a share and value of private property in economy".

In the Republic there also operate Resolution on special industrial zone "Dzhizak", Cabinet of Ministers of the Republic of Uzbekistan confirmed by Decision from 15.05.2013; Resolution on special industrial zone "Angren", Cabinet of Ministers of the Republic of Uzbekistan confirmed by Decision from 29.05.2012; Resolution on free industrial-economic zone "Navoi" confirmed by the Decision of the Cabinet of Ministers of the Republic of Uzbekistan from 27.01.2009.

Foreign investors can create on the territory of republic of the enterprise in any, supposed by the legislation, organizational-legal form. The law provides various forms of realisation of investments:

- Creation of juridical persons or individual share in their authorised capitals (authorised capital stocks), including acquisition of property and actions;
- Acquisition of securities, including the promissory notes emitted by residents of the Republic of Uzbekistan;
- Acquisition of concessions, including concessions on investigation, working out, extraction or use of natural resources;
- Acquisition of property according to the legislation, including property right to objects of intellectual property, and also to objects of trade and service sphere, together with the ground areas on which they are placed;
- Acquisition of possession and using land (including the basis of rent) and other natural resources.

Investments can be carried out and in other forms which are not contradicting the legislation.[Rep, 2014a]

Regulatory legal acts of the Republic of Uzbekistan fixed major positions on guarantees, privileges and preferences established for foreign investors and the enterprises with foreign investments. So, for example, on 10.04.2012 the Decree of the President of Uzbekistan "On additional measures on stimulation of attraction of direct foreign investments" was been adopted, etc.

Creation of favorable conditions for development of investment activity in Uzbekistan and generated sufficient legal base in details are regulating these activity, promoted considerable growth of investments into the economy of republic. The following data testifies it: in 2014 the investment volume in economy increased by 10,9 percent and made in equivalent of 14,6 billion US dollars.

In realisation of investment program more and more active participation there adopted by direct private investments at the expense of own means of the enterprises which only for the expired year increased by 10,3 percent and made in equivalent of 4,3 billion dollars, or nearly 30 percent of all volumes of investments. Investment activity of commercial banks by which within a year on the investment purposes there directed 1,7 billion dollars, or 20 percent more than last year. Over 73 percent of all investments were directed on industrial building and about 40 percent - for acquisition of cars and equipment.

It is necessary to note distinctive feature of investment policy conducted in Uzbekistan. The priority is given to the investment projects directed on creation of new hi-tech manufactures,a local source of raw materials providing deep processing.

In 2014 in leading branches of economy 154 large objects by total cost of 4,2 billion the dollars, equipped with the modern hi-tech equipment are placed in operation [Rep, 2014b].

Now within the limits of Investment program for 2015 there is begun realisation of 53 new investment projects by total cost over 4,8 billion dollars. Manufacture more than 430 new kinds of localised production is mastered. Growth of investment ac-

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tivity promoted increase in volumes of contract civil work at 18,9 percent.

During of period of 2015-2019 on modernisation, technical and technological updating of manufacture by total cost of 40,8 billion US dollars, 141 projects on building and development of objects of engineering-communication and road and transport infrastructure there planned realization of 846 projects for a total sum of 9,8 billion US dollars, and also 602 projects on manufacture localisation for a total sum more than 5 billion US dollars.

3 Conclusion

Realization of problems on further development of investment activity in the Republic of Uzbekistan will provide a strong base to the further growth of economy, deepening of structural transformations and diversification of manufacture, raising on new high level of development of major industries, formation of more modern and developed infrastructure.

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Graduate School of Economic Development and Innovation

Jabriev Akbarali Nuralievich, Ph.D.,
Profesor
Tashkent Architectural and
Construction Institute
Uzbekistan

Gimush Rifgat Idrisovich, Ph.D.,
Associate Professor
Tashkent Architectural and
Construction Institute
Uzbekistan

Davletov Islambek Halikovich, Ph.D.,
Associate Professor
Tashkent Architectural and
Construction Institute
Uzbekistan

Abstract

The paper provided insight to the role of graduate school on economic development and innovation. Uzbekistan has adopted a policy of objectively necessary modernization of the economy, which requires a sharp acceleration of scientific and technological progress and innovation development of production in all sectors, including in the construction industry. Based on literature review we concluded the level of scientific and technical developments in Uzbekistan universities is often little inferior to foreign analogues. Some suggestion provided to overcome this phenomenon were build training centers focusing on the combination of the educational process with scientific activity; raise university budget and trust them to manage the budget independently but demand them to practice good governance;

Keywords :Economic development, graduate school, Uzbekistan Universities

1 Introduction

In difficult conditions of the global financial and economic crisis in Uzbekistan consistently strengthened economic stability, dynamically increasing the pace of socio-economic development of Uzbekistan. This is clearly reflected in the election program of the President of the Republic of Uzbekistan Islam Karimov1.

Since last year, Uzbekistan has adopted a policy of objectively necessary modernization of the economy, which requires a sharp acceleration of scientific and technological progress and innovation development of production in all sectors, including in the construction industry. Analyzing the construction from the standpoint of technical level of production, it should be noted that to this day on construction sites, a high proportion of manual labor, there is considerable downtime, quality of construction and its terms are often not meet the requirements of consumers, no norms SNIP (SHNK). Used in the construction of objects of the same materials and technologies often reflect scientific and technical level many years ago.

Increase in transportation costs due to the faster increase in energy prices, unfortunately, little oriented enterprises building industry to use local raw materials, and waste including industrial and agricultural production for the production of building materials and structures, the importance of the substitution of imported materials in Uzbekistan.

In the building there is a fairly passive response to changes in the market structure of construction products. Assessing the priority and sequencing of innovation in construction, based on the overall trends in the industry, can and should pay attention to the development of new technologies and materials for the construction of facilities.

Innovative development of the economy, on the one hand, determines the need for continuous development and improvement of the educational system. Thus this paper was intended to provide insight the role of graduate school on economic development and innovation.

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2 Discussion

Innovative development of the economy, on the one hand, determines the need for continuous development and improvement of the educational system. Note that according to experts developed countries get through the formation of 30% of national income. Also note that the development of higher education is under scrutiny the country's leadership, as evidenced by a number of new government regulations, such as deciding on the rating assessment of universities [201, 2012]. Note that the scientific activity in the system rating assessment universities allocated 35% of the score, which is very important.

On the other hand in terms of reforming the economy and modernization of higher education institutions play a special role of high priority, which is not only to ensure the modern economy and society staff, but also in the initiation of the economy in the most modern technical and technological, organizational and economic innovation. The level of many scientific and technical developments made by domestic universities often little inferior to foreign analogues, and in some cases ahead of them, in fact, they correspond to national standards. The low level of demand for these university developments caused, in our opinion, the following reasons:

1. Lack of university scientists experience in the market, which is the inability to widely present their scientific and technical production, convincingly explain and communicate the benefits of the ability of consumers research products and the expected benefits from its use;

2. presence inherited from the old system stereotype when a scientist, as a rule, received their reward only during the execution of scientific development, and not at the stage of implementing and operating;

3. lack of systematic practice of bringing scientists (students) their developments to the general industrial use;

4. the complexity of bringing development to the widespread use due to lack of knowledge of university scientists work in conditions of market relations, lack of time and developers need significant additional investment.

Analyzing the practice of industrialized countries in this field, it should be noted that the foreign training centers focusing on the combination of the educational process with scientific activity. In particular, in Germany with great concern are moving research from universities in academic institutions as it may, according to the German analysts, the negative impact on the quality of training.

Extra budgetary revenues in foreign training centers mainly formed due to educational services and research and development (innovation), as well as consulting activities and often in the range of 20% of the budget of the university. Moreover, these "non-core" activities are supported by the management of higher education institutions, state and public organizations. Moreover, there are examples where the universities actually turn into a major educational, scientific and industrial enterprises with an annual turnover comparable in terms of turnover with large corporations. [Allan and dr, 2000]

Thus many universities have a high degree of autonomy and including financial activities. This seeming fairly high degree of freedom in the harsh conditions of universities (the presence of competition) leads to the need for an independent (from the university) develop financial and business tactics and strategies to the constant search for reserves to reduce costs, finding additional sources. The use of funds in foreign universities established estimates, methods of formation are based on the principles of "transparency", and in some countries (eg the Netherlands) estimates are approved after discussion by representatives of students and teaching staff. Performance report is subject to public and internal accountability (audit).

In these matters, the experience of the Higher School of the Russian Federation. When the economy of this country is in the initial stages of transition, landslide restructuring of the system of financing higher education institutions, as well as its transition to a market economy has led to inconsistent results when a number of universities with strong potential deep enough "moved" into the market and can be considered to be thriving while others, mainly provincial, undergoing difficulties due to lack of government funding.

A positive phenomenon, carried out in recent years in the Russian Federation is the establishment of regional federal universities with strong academic and research base, which act as regional scientific and educational outposts. Thus, in many foreign countries, the status of universities provides for mandatory participation in their scientific activities and their tight integration with industry.

Necessary in this and subsequent stages of development of the economy revitalization national high school in the innovation process can be checked by using the method in foreign universities: the creation of various venture structures with funds from various sources (possibly at the same time from multiple) up to obtain bank and commercial loans from interested companies .

The purpose of the venture capital units - bridge the gap between university science and industry, to provide intensive occurrence of this science in the market. To achieve high levels of higher education institutions in the implementation of research, development and other innovative work is necessary:

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1. Inclusion for performance evaluation of faculties and departments of the university for the year indicators, taking into account not only the amount and status of R & D performed, but also the size obtained from the sale of financial revenue;

2. An ordered collection of information on existing domestic, foreign and international funds and the organization of seminars at universities on how to obtain and implement grants, competitive research scientific and educational nature;

3. Identification of appropriate logistical and human resource capacity of the university orders of enterprises and organizations and to develop an action plan for the phased strengthening of material (research) framework and ensure its adequacy to the expected structure of orders for scientific and technical products; development plan (re) training.

In addition, based on the experience of foreign financing of high school, in our opinion, should, on the one hand, to outline prospective change the trajectory of the system of financing and managing the national high school, and, on the other hand, to prevent possible errors in this rather complex way. The system of financing higher education in Uzbekistan, as the analysis shows, meet the latest stage of socio-economic development of society. Moreover, to support the funding of universities in Uzbekistan organized training on a fee basis, which provided a significant influx of funds. Universities are given broad rights to use additional extra-budgetary sources. The results of such extra budgetary activities, and the use of funds received, as shown by the analysis, are not sufficiently effective [Gimush and Khairova, 2014].

This is largely due lack of experience management staff of universities to work in market conditions and the lack of the necessary analytical tools that will more fully realize the financial opportunities provided. Certainly, the creation of such analytical tools can and should be implemented within the existing organizational and legal acts and regulations, and its purpose is to provide a stable and significant influx of extra budgetary funds and to ensure the rational use.

Principles of creation of such teaching materials consist of priority provision of educational services and the implementation of R & D as a source of extra-budgetary funds and the application of more advanced methods of on-farm activities of the university. They should take into account the need for greater occurrence of high school in the education market and the innovation process.

The implementation of this approach is one of the first and mandatory, in our opinion, steps improvement of universities in the modernization of the economy and, of course, will achieve a multiplier effect, which consists in introducing into the economy of effective innovation and growth in the quality of training. Of course, that the improvement of the activity of the higher school in the conditions of economic modernization and strengthening the innovation activities of universities has a synergistic socio-economic impact, affecting the quality of training and to enhance economic modernization.

3 Conclusion

The level of scientific and technical developments in Uzbekistan universities is often little inferior to foreign analogues. Some suggestion provided to overcome this phenomenon were build training centers focusing on the combination of the educational process with scientific activity; raise university budget and trust them to manage the budget independently but demand them to practice good governance.

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The World Trade Organisation as A Base for International Trade Without Limits Vs. Economic Sanctions: Are Economic Sanctions Permitted in The WTO-Law?

Boris A. Ogonyants
PhD, Associate Professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Kristina B. Ogonyants
Applicant
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

The article deals with the main issues the imposition of restrictive measures and economic sanctions in the framework of the WTO. The authors discuss the relationship of economic sanctions and basic principles of the WTO in details, as well as the legality of the application of Article 21 of the General Agreement on Tariffs and Trade, the main document of the WTO, as economic sanctions.

Keywords :international trade, World Trade Organization (WTO), free trade, international law, economic sanctions, GATT, dual-use goods, world economy

World Trade Organization (WTO) is the one of the biggest international trade organization with 161 member's states[wto,], which supports the free trade between the states. All rules of WTO-law based on the five simple principles from various agreements of WTO-law: 1)trade without discrimination-principle, follows from General Agreement on Trade in Services (GATS) (Article 2) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Article 4), Article 3 of GATT, Article 17 of GATS and Article 3 of TRIPS. 2) transparency, that determinates in the legal obligation Article X GATT, Article III GATS[Hoekman,] and realized in the form of Trade Policy Review Mechanism (TPRM)[Chaisse and Chakraborty, 2007]. 3) safety valves, that means intervention in the free-trade rules only to protect environment, public health or economic of the country in emergency. These measures should be applied only as protection in the case, if exists real danger for economic or environment collapse of the country, but not to ensure the advantages of the own home companies[wto,]. 4) Binding and enforceable commitments that include

Article VII, Article XI, Article II of GATT. Every member of World Trade Organization should ensure the observance of obligation and basic principles of WTO[Hoekman,]. 5) Reciprocity: a principle of reciprocity permits to use the same trade rules, which apply another country to your goods or services. This principle was created to avoid an exploiting of the MNF-rule (most-favored-nation)[Hoekman,]. All rules of WTO should ensure liberalization on the global trade market and free trade without any limits between countries, regardless of any differences in the political interests.

But, what about economic sanctions in the form of embargos or restrictive rules? In the last two years the big geopolitical players: United States of America, European Union and Russian Federation imposed embargos as economic sanctions against each other to protect their own political interest in the Ukraine conflict, despite of the fact, that all these countries are members of WTO. The same situation we can see between United States and China: the trade sanctions of United States of America against China, member of WTO, are based on the statement that China violates basic human rights. Are they compatible with the rules of WTO? Isn't it a violation of the non-discrimination principle and the idea of free trade?

In the international economic law dominate the opinion that justify such sanctions as a measure of essential security interests, are allowed according Article XXI GATT. As Maarten Smeets, counselor in the World Trade Organization, states "Economic sanctions are used relatively infrequently, and although they undermine the principle objective of the WTO, which is to liberalize trade, they can in no way be considered a threat to the system itself. .....the founders of GATT and later of the WTO deliberately left room for members to have recourse to the exceptions allowed under Article

XXI, mainly as a tool to secure essential security interests[Smeets, 2000]." The same opinion have Patricia Stirling, that appeal on the necessity of such sanction to protect a human rights "In light of the overwhelming support of sanctions to remedy violations of internationally accepted trade practices, it is logical to make use of an existing trade regime such as the WTO to enforce another equally pressing problem, violations of basic human rights by member states. When a member state faces the possibility of loss of access to international markets if it violates the human rights of its residents and citizens, it may think twice about committing such violations. " [Stirling,]

First of all to avoid any misunderstanding it should be clear that the WTO-rules don't contain a concept of „sanctions. " In the both cases: United States of America, European Union vs. Russian Federation and United Stated vs. China we speak about using „Security Exceptions" as sanctions. As Steve Charnovitz emphasizes "To be sure, the WTO Agreement does not employ the word "sanction". What the Dispute Settlement Understanding (DSU) of 1994 says in Article 22 is that if a government fails to bring a measure found to be inconsistent with a WTO rule into compliance, it shall enter into negotiations with the government invoking dispute settlement, and if no mutually acceptable compensation is agreed, the plaintiff government may seek authorization from the WTO Dispute Settlement Body(DSB) "to suspend the application to the Member concerned of concessions or other obligations under the covered agreements." [Charnovitz,]

Indeed, the both opinions, Maarten Smeets and Patricia Stirling, appeal on the Article XXI GATT "Security Exceptions, that generally speaking can be use to limited trade between countries without violations of the WTO-law, but they disregard the important fact that the list of exceptions are irrefragable and cannot be extended with new formulation of "essential interests." Additionally, according Article XXI GATT the restrictions can be use only to protect: public morals; human, animal or plant life or health; conservation of exhaustible natural resources, prevention of deceptive practices and not to punish someone. In case of China the use of sanctions was justified officially with violation of human rights in China that can be an object of protection human life as a one of the basic human rights but only in the country of origin of these sanctions and not as a penalty for China. It must be noted that the country should also use the „Necessity Test", to prove legality of the restrictions. The test contains two steps: Step 1"Weighing and balancing"and Step 2"Alternative Measures". [Ares and Mitchell, 2012]Only after passing such test the country can use the measures to protect „essential interest".

However, in the cases the United States vs. China and United States of America, European Union vs. Russian Federation can be used Paragraph (b) of Article XXI: "action". During discussions in the Geneva session of the Preparatory Committee, in connection with a proposal to modify Article 37(g) [XX (g)] to permit export restrictions on raw materials for long-term defense purposes, the question was put whether the phrase "for the purpose of supplying a military establishment" would permit restrictions on the export of iron ore when it was believed that the ore would be used by ordinary smelting works and ultimately for military purposes by another country.[ind,] According the official comments to Article XXI also the "dual-use goods" can be covered by Article XXI "At the Third Session in 1949, Czechoslovakia requested a decision under Article XXIII as to whether the US had failed to carry out its obligations under

Articles I and XIII, by reason of the 1948 US administration of its export licensing controls (both short-supply controls and new export controls instituted in 1948 discriminating between destination countries for security reasons). The US stated that its controls for security reasons applied to a narrow group of exports of goods which could be used for military purposes and also stated that "the provisions of Article I would not require uniformity of formalities, as applied to different countries, in respect of restrictions imposed for security reasons". It was also stated by one contracting party that "goods which were of a nature that could contribute to war potential" came within the exception of Article XXI. The complaint was rejected by a roll-call vote of 17 to 1 with 3 abstentions. "[ind,]

Summarizing we can say that the application of the economic sanctions are generally incompatible with WTO-rules and break the idea of free trade without limits between the countries. Article XXI permits to limit trade between the members of WTO only regarding "dual-use goods, which could be used for military purposes." The list of the "security exceptions" is irrefragable and cannot be extended with new formulation of "essential interests." It is recommended to use security exceptions only in the emergency and pass the "Necessity Test" before application of the Article XXI.

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Analysis of Internal Control System on Financial Statements Government Opinion

Teddy Oswari
Faculty of Economic
Universitas Gunadarma
toswari@staff.gunadarma.ac.id

Anugerah Adhi Prasetyo
Faculty of Economic
Universitas Gunadarma
anugrah@staff.gunadarma.ac.id

Abstract

Accountability, transparency and reliability of financial reporting is key in reaching Opinion WTP. implementation of internal control in government agencies, in the National Medium Term Development Plan (RPJMN) 2010-2014 SPIP implementation be used as one indicator of mainstreaming good governance, which must be implemented by each agency and became an operational basis for the entire implementation of developmen, an effective system of internal control in each government agency used as a priority activity areas of the state apparatus (in RPJMN 2010-2014) conducted by BPKP. This study is a qualitative research. This study illustrates what is causing the government gets opinions Fair With Exception (WDP). Results of this study are expected to provide input to the report's authors to be able to present the audit report in accordance with the criteria set by the CPC. While SPIP is a system of internal control that is held in the whole central and local government. Elements of Internal Control System (SPI) in PP-SPIP refers SPI elements that have been practiced in government in various countries, which include five elements 1) control environment (8 sub-elements), 2) risk assessment (2 sub elements), 3) control activities (11 sub-elements), 4) information and communication (2 sub-elements), and 5) monitoring of internal control (3 sub elements).
Keywords : control, system, financial, opinion

1 Introduction

The creation of financial performance accountability is an absolute thing manifested by a regional leader. It is implicit in the Act (Act) No. 17 of 2003 on State Finance, Law number 01 of 2004 on State Treasury, and Law number 15 of 2004 on the Audit of the Management and Financial Responsibility State. Article 31 paragraph (1) Act No. 17 of 2003 states the Governor / Regent / Mayor submitted a draft local regulations (regulations) on the accountability of the budget to Parliament in the form of financial statements, audited by the Supreme Audit Agency (BPK) not later than 6 (six) months after the fiscal year ends. 'm Article 31 paragraph (2) of Law No. 17 of 2003 states the financial statements include budget realization report, Balance Sheet, Cash Flow Statement and Notes to the Financial Statements, accompanied by the local government financial reports. One concrete efforts to achieve transparency and accountability in public finance management is the submission of the financial statements that meet the government's principles on time which is based on the government accounting standards. Namely Government Regulation (PP) No. 24 of 2005 on Government Accounting Standards.

Realize accountability and transparency in governance is not as easy back your hand, required an intensive effort undertaken on an ongoing basis. In 2008 the Government issued Government Regulation No. 60, 2008 concerning the Government Internal Control System (SPIP). Designing PP was initiated by the Finance and Development Supervisory Agency (BPK) as the implementation of Article 58 paragraph (2) of Law No. 1 of 2004 on State Treasury. SPIP aims to provide reasonable assurance for achieving effectiveness and efficiency in achieving the objectives of the governmental activities, the reliability of financial reporting, safeguarding of state assets, and compliance with laws and regulations. With the PP-SPIP then every minister / head of the institution, governors, regents / mayors shall exercise control over the implementation of the activities of government based on the SPIP as stated in Article 2 paragraph (1), and also responsible for the effectiveness of internal control systems in the each. Chairman of the CPC at the time, Anwar Nasution, a positive response to the issuance of PP-SPIP by saying that the PP has been long-awaited CPC. One reason why the CPC many times to give an opinion or a disclaimer does not provide an opinion on the financial statements of the central government (Audited) partly because of the inadequacy and lack SPIP SPIP institutionalized.

Internal Control System (SPI) is an implementation of the monitoring phase contained in the budget cycle (budget cycle) consisting of: 1) Stage bud-

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geting, 2) Budget approval stage, 3) Stage of implementation of the budget, 4). Phase pegawasan budget execution, 5) Phase ratification budget calculations. Under Law No. 1 of 2004 on State Treasury, President as head of government was given the mandate to organize and conduct the internal control system within the government as a whole in order to improve performance, transparency, and accountability in financial management. On the basis of these rules, on August 28, 2008 the government issued Government Regulation No. 60 of 2008 concerning the Government Internal Control System (SPIP). PP No. 60/2008 further provides direction on how to implement the concept and the SPIP.

This paper aims to determine the extent of influence of the reliability of the Government Internal Control System (SPIP) has been implemented, the relationship between subjective statements of SPIP with external control apparatus, and the factors that influence the increase or decrease in the quality and presentation of financial statements through a subjective statement of CPC.

2 Research Method

This study is a qualitative research. This study illustrates what is causing the government gets opinions Fair With Exception (WDP). Results of this study are expected to provide input to the report's authors to be able to present the audit report in accordance with the criteria set by the CPC.

Secondary data used were obtained from a third party such as the Internet, newspapers, and articles. Analysis of documents or content analysis is a method that includes the collection of data and information through testing records and documents. Secondary data were obtained from the Supreme Audit Agency in the form of Statements Audit Reports Government finances.

3 Discussion

Government Regulation No. 60 of 2008 has been a standard or reference in implementing governance and financial accountability, the implementation of the budget. In Article 56 paragraph (4) of Law number 01 of 2004, declared Local Government Finance Report (Government) should be prepared based on the system of internal control (SPI). The role of SPI is to improve performance, transparency, and accountability in the financial management of the State. President as head of the government regulating and organizing the internal control system within the government as a whole. The purpose and objectives of the government set PP No. 60 of 2008 on the system of internal control government (SPIP) is to improve the quality of financial reporting transparency and accountability of local government as a supporter of the financial statements of the Supreme Audit Agency (BPK). Article 15 paragraph (1) of Law Number 15 of 2004 states the examiner (CPC) prepared a report on the results of the examination (LHP) after the examination is completed and Article 16 paragraph (1) of Law Number 15 of 2004 states that the examination report on the government's financial statements containing opinions . Opinion is a professional statement to the conclusion the results, the level of fairness of the information presented in the financial statements of local governments.

BPK audit results in the form of a report of investigation (LHP) and giving opinions on the fairness of presentation of financial statements. In conclusion the results: a) Unqualified (WTP), b) Naturally, With Exception (WDP), c) Not Fair (TW) d. disclaimer. PP No. 60 of 2008 concerning the Government Internal Control System, SPI is an integral process in actions and activities performed on a continuous basis by the management and all employees to provide reasonable assurance on the achievement of organizational goals through effective and efficient, the reliability of financial reporting, security state assets, and compliance with laws and regulations. While the Government Internal Control System (SPIP) is the Internal Control System as a whole held at the central and local governments.

Government Regulation (PP) No. 8 of 2006 on financial reporting and the performance of government agencies, SPI is a process that is influenced by management designed to provide sufficient confidence in achieving effectiveness, efficiency, compliance with laws and regulations, and the reliability of the presentation Government's financial statements. The relationship between subjective statements of SPIP with external control apparatus, CPC as a functional unit extern officers have the authority to conduct an audit to account for the reliability of the financial management responsibilities of local government, based on the Internal Control System has been implemented by the Government of the head region. In Article 2, paragraph (3) Regulation No. 60 of 2008, SPIP goal is to provide reasonable assurance for achieving effectiveness and efficiency in achieving the objectives of the state government, the reliability of financial reporting, safeguarding of state assets, and compliance with laws and regulations. A SPIP said to be good if it meets the five elements of Internal Control System (Sudjono and Hoesada, 2009) which include:

1. Environmental control of the government agencies that influence the effectiveness of internal control.
2. Risk assessment on the possibility of events that threaten the achievement of the goals and objectives of government agencies.
3. Control activities to address the risks and the

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establishment and implementation of policies and procedures to ensure that the measures address the risks have been effectively implemented.

4. Information and communication. Information is data that has been processed can be used for decision making in the course of the duties and functions of government agencies. Communication is the process of delivering a message or information to use a particular symbol or emblem either directly or indirectly, to obtain feedback.

5. Monitoring of internal control over the performance of SPI and processes that provide confidence that the findings of audits and other evaluations followed up immediately.

Internal Control System (SPI) in the reporting entity (local government) is a factor that determines the reliability of the financial statements of the entity. Therefore, in giving an opinion on the fairness of financial statements diauditnya, auditors confidence in the effectiveness of the controls laid. Similarly, the BPK auditors in carrying out their assignment should be supported by an understanding of the internal control of a local government for planning audit (Mulyadi, 2002). Regulation of the Minister of Home Affairs No. 4 of 2008 on guidelines for the implementation of the review of the financial statements of governments, SPI is a process that is influenced by management designed to provide sufficient confidence in achieving effectiveness, efficiency, compliance with laws and regulations, and the reliability of the presentation financial statements.

The auditor's understanding of internal control are used for 1) The possibility of whether or not the audit conducted, 2) Potential material misstatements that may occur, 3) Risk detection, 4) The design of substantive tests. Assessment of the SPI is useful to identify the management procedures that have a regional financial risk for the occurrence of a material misstatement in the financial statements. Assessment of the SPI made by parties who have the authority as a unit supervisor intern and extern auditor (inspector or BPKP) and auditor (CPC).

Procedures for assessing the SPI made through the following process: a) Understanding financial management systems and procedures covering areas: Systems and Procedures Cash Receipts; Cash Expenditure Systems and Procedures; Accounting Systems and Procedures Unit; Accounting Systems and Procedures Regional Financial Management Officer (PPKD); Systems and Procedures Preparation of Financial Statements. b) Observation and/or interviews with stakeholders in each procedure. This activity is to identify the risks that may arise in each sub-process and the presence of existing control system in order to anticipate the risks concerned. c) Do an analysis of the risks that have been identified to a conclusion about the possibility of a material misstatement in the financial statements. d) Do an analysis of the risks that have been identified to a conclusion about the direction of the implementation of SPI testing.

Effectiveness of internal control systems of government (SPIP) is the responsibility of the leadership of the Institute / Governor / Regent / Mayor. Includes the following activities: a) Internal control over local governance, duties and functions of the agency, including financial accountability. Committed by the internal watchdog of government (APIP) through auidt assignment, review, evaluation, monitoring, and other monitoring activities. b) SPI implementation of government guidance. Under the terms of the legislation, through the preparation of technical guidelines SPIP implementation, dissemination, education and training, coaching and consulting, and increase the competence of auditors. The relationship between subjective statements of SPIP with external control apparatus, CPC, the effectiveness of Internal Control System is determined by the commitment of Government of each head of the institution / Governor / Regent / Mayor in complying with laws and regulations of management of local finance, the conclusion that the results of the examination conducted by CPC, can be a subjective statement includes a. Unqualified (WTP), b. Naturally, With Exception (WDP). c. Not Fair (TW) and d. dicleamer.

4 Conclusion

With the issuance of Government Regulation No. 60 of 2008, each government agency is obliged to apply the SPIP in its activities. Application SPIP properly will improve the image of government being able to achieve its goals effectively and efficiently, featuring reliable financial reporting, and prevent the state from loss because it has the human resources to obey the rules. There are five elements of leadership SPIP requiring government agencies to have certain competencies and perform certain tasks. For that, it's time to prepare the entire leadership of government agencies and organizations that led him to apply SPIP.

The presence of SPIP is a step forward considering that there is no minimum guideline for government agencies at the time of going to design internal control. Internal control system (SPI) in PP-SPIP interpreted as an integral process in actions and activities performed on a continuous basis by the management and all employees to provide reasonable assurance on the achievement of organizational goals through four pillars, namely 1) effectiveness and efficiency of achievement of objectives, 2) the reliability of financial reporting, 3) security of state assets, and 4) compliance with laws and regulations.

While SPIP is a system of internal control that is

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held in the whole central and local government. Elements of Internal Control System (SPI) in PP-SPIP refers SPI elements that have been practiced in government in various countries, which include five elements 1) control environment (8 sub-elements), 2) risk assessment (2 sub elements), 3) control activities (11 sub-elements), 4) information and communication (2 sub-elements), and 5) monitoring of internal control (3 sub elements).

For the realization of a powerful and effective SPIP, the five elements SPIP should be applied in an integrated and integral part of the activities of government agencies. The application is intended to be integrated all the elements are applied, starting from the development of the control environment elements (8 sub-elements), to the elements of internal control monitoring (3 sub elements).

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Financial Inclusion and Subaltern Communities of Thiruvananthapuram District, Kerala INDIA

Dr. Deepa B.
Assistant Professor, Department of Economics M.G. College, Nilamel, KERALA

Dr. Syamlal G. S.
Assistant Professor, Department of Economics NSS College, Nilamel, KERALA
shaamg@gmail.com

Abstract

Indebtedness is increasingly being recognized as a significant obstacle for development as it not only aggravates inequality in the access to socioeconomic opportunities, but also hinders the growth process. The tendency that is prevalent in India is that when we borrow money, we gave only scant regard to our repayment capacity and hence it can be rightly exclaimed that the tribal communities are born in debt, lives in debt and dies in debt. Based on the literature review it is observed that Kannikar tribes who reside in Thiruvananthapuram and Kollam districts of Kerala can be regarded as a group who are well advanced than their counterparts in other parts of Kerala. Right from the early days of the Travancore Kingdom they were included into the development process. In this backdrop the study tries to examine the various financial inclusion initiatives undertaken by the financial institutions in the study area. The study area is confined to Thiruvananthapuram district of Kerala which has large inhabitation of Kaanikkar tribes. We observe that the prevailing forms of financial exclusion comprises of geographical exclusion, social exclusion, educational exclusion and bureaucratic exclusion. To overcome these hurdles, we should not only strengthen the financial inclusion services provided by the financial institutions, we need to strengthen the financial literacy programmes. Only then the tribal communities can be brought under the ambit of theinclusive growth process. The study is of the view that along with the strengthening of the network of financial institutions like nationalized banks, co-operative credit institutions etc. among the marginalized communities there should also be a check on the activities of private moneylenders not only to overcome tribal indebtedness but also to increase their standard of living.

Keywords :Financial Inclusion, tribal communities, Right to access

1 Introduction

Economic theory, through the life-cycle hypothesis (LCH) conveys that individuals plan their consumption and savings behaviour over their lifecycle[Deaton, 2005]. They intend to even out their consumption in the best possible manner over their entire lifetimes, doing so by accumulating when they earn and dis-saving when they are retired. The key assumption is that all individuals choose to maintain stable lifestyles. This implies that they usually don't save up a lot in one period to spend furiously in the next period, but keep their consumption levels approximately the same in every period.But the poor are typically excluded from the wageearning employment opportunities that traditional economic theory presupposes. They live and work in the informal economy—not by choice, but by necessity. In economic terms, they are consuming households and self-employed firms at the same time; thus consumption and production decisions are intertwined. As a result, they need a broad range of financial services to create and sustain livelihoods, build assets, manage risks, and smoothen consumption.

The traditional distinction between consumer financial needs versus the financial needs of firms is often blurred. Empirically, financial diaries literature has illustrated this point by showing how poor families in the informal economies of developing countries actively manage their financial lives to achieve these multiple objectives [Daryl Collins and Ruthven, 2010]. They save and borrow constantly in informal ways. At any given time, the averagepoor household has a large number of ongoing financial relationships. Financial management is, for the poor, a fundamental and well-understood part of everyday life.

Estimates of the share of the world population living and working in the informal economy vary between 50 percent and 60 percent (World Bank, 2012). The Gallup World Survey 2012 reports that only about 40 percent of adults globally have fixed employment in excess of 30 hours per week.

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These are averages across all countries and income groups. The share of informality is considerably higher for poorer countries and poorer income segments and can reach well over80 percent or even 90 percent in some developing countries (ILO, 2013). The share of informal employment is mirrored in the estimates for financial access. Globally, about half of all working-age adults are excluded from formal financial services. For the lowest income quintile, 77 percent are excluded [Demirguc-Kunt and Klapper, 2010]. In countries such as Cambodia, the Central African Republic, and Niger only 2–4 percent of all adults have an account at a formal financial institution. Without access to formal financial services, poorfamilies must rely on age-old informal mechanisms: family and friends, rotating savings schemes, the pawn-broker, the moneylender, money under the mattress. At times, these informal mechanismsrepresent important and viable value propositions. Often, however, they are insufficient and unreliable, and they can be very expensive. Financial exclusion tends to impose large opportunity costs on those who most need opportunity.

2 Review of Literature

The topic of financial inclusion as a growth promoting and poverty eradicating strategy had been highlighted by many researches. Yet total financial inclusion is yet to be realized dream not only in developing but also in developed country as well.

Sinclair (2001) indicated that the nature and forms of exclusion and the factors responsible for it are varied and, thus, no single factor could explain the phenomenon. So the principal barriers in the expansion of financial services are often identified as physical access, high charges, and penalties, conditions attached toproducts which make them inappropriate or complicated and perceptions of financial service institutions which are thought to be unwelcoming to low income people.

Kempson et al. (2000) analysed in their report the range of physical and geographical barriers to financial inclusion factors that can contribute to financial exclusion for different products and individuals under certain circumstances. There are a number of 'dimensions' or 'forms' of financial exclusion that have been identified.

United Nations (2006) report emphasized that exclusion may also have resulted from a variety of structural factors such as unavailability of products suiting their requirements, stringent documentation and collateral requirements and increased competition in financial services. There has also been particular emphasis on sociocultural factors that matter for an individual to access financial services.

Dr Debesh Roy's (2012) research report emphasized that out of 600,000 habitations in the country; only about 5 percent have a commercial bank branch. Also only about 57 percent of the population across the country has bank account (savings), and this ratio is much lower in the North-Eastern states. Further, 13 percent of the population has debit cards and 2 percent has credit cards. India has a significantly low level of financial penetration compared with OECD countries. However, in India access to finance, access to credit is worse off when compared with China, Malaysia, and Thailand.

Mandira Sarma (2012) in her study revealed that the promotion of an inclusive financialsystem is a policy priority in many countries. While the importance of financial inclusion is widelyrecognized, the literature lacks a comprehensive measure that can be used to calculate the extent offinancial inclusion across economies. This dissertation attempts to fill up this research gap byproposing a multidimensional index of financial inclusion. The proposed index of financial inclusioncaptures information on various dimensions of financial inclusion in one single number lying between 0 and 1, where 0 denotes complete financial exclusion and 1 indicates complete financial inclusion in an economy.

2.1 Importance of the Study

Access to finance by the poor and vulnerable groups is a prerequisite for poverty reduction and social cohesion. This has to become an integral part of efforts to promote inclusive growth. In fact, providing access to finance is a form of empowerment of the vulnerable groups. The access to using banking services is considered as a universal need as it is "fundamental to enable full participation in economic and social life" [Sinclair S and M, 2009]. The lack of it may stigmatize the people, leading even to social exclusion [Anderloni, 2008]. Having a bank account is imperative in the sense that it is an entry into an array of financial services, which can be offered to people to mitigate different type of shocks that can come in their way. Having bank account is an important precondition to participate in the economy in which a person lives [Roy, 2011]. In simple parlance and in its very raw form financial exclusion is generally understood to connote the condition of not having availed of bank account or transaction account from a formal bank. This is because, the primary and the fundamental financial service that one should get in the realm of finance is to have an account in a formal bank with all facilities that such an account offers.

Financial inclusion denotes delivery of financial services at an affordable cost to the vast sections of the disadvantaged and low-income groups. The various financial services include credit, savings, insurance and payments and remittance facilities.

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The objective of financial inclusion is to extend the scope of activities of the organized financial system to include within its ambit people with low incomes. Through graduated credit, the attempt must be to lift the poor from one level to another so that they come out of poverty.

NSSO data reveal that 45.9 million farmer households in the country (51.4%), out of a total of 89.3 million households do not access credit, either from institutional or non-institutional sources. Further, despite the vast network of bank branches, only 27% of total farm households are indebted to formal sources (of which one-third also borrow from informal sources). Farm households not accessing credit from formal sources as a proportion to total farm households is especially high at 95.91%, 81.26% and 77.59% in the North Eastern, Eastern and Central Regions respectively. Thus, apart from the fact that exclusion in general is large, it also varies widely across regions, social groups and asset holdings. The poorer the group, the greater is the exclusion. While financial inclusion can be substantially enhanced by improving the supply side or the delivery systems, it is also important to note that many regions, segments of the population and sub-sectors of the economy have a limited or weak demand for financial services. In order to improve their level of inclusion, demand side efforts need to be undertaken including improving human and physical resource endowments, enhancing productivity, mitigating risk and strengthening market linkages.

2.2 Study Area

Kerala can be classified into three regions comprising of lowland, midland and the highland regions. In each region there are certain pockets or communities who can be regarded as outlier who ranges from the fisher folk in the lowland area, the slums in the sophisticated urban midlands and the subaltern tribal communities who are expected to dominate the highland areas.

Based on the Socio-Economic Survey of Scheduled Tribes initiated by the Department of Scheduled Tribes, revealed that the population of Scheduled Tribes has increased from 3,64,189 in 2001 to 4,26,208 in 2011. The decadal growth of Scheduled Tribes works out to 17.03 per cent, where as the growth of the general population during 2001-11 is only 4.86 per cent.

Kanikkar are distributed mainly in Thiruvananthapuram and Kollam Districts and in the adjoining areas of Tamil Nadu. They were called 'Kanikkar' by the Sage Agastya, signifying 'hereditary proprietor of the land'. 'Kani' means land and 'Karan' means owner. The 'Kanikudi' or 'Kanipat' (settlement) is the basic unit of social, economic, political and religious organisation. Each 'Kanipat' is headed by a 'Muttukani' who enjoys great powers. Earlier they subsisted on hunting, minor forest produce collection and cultivation. Now they practise settled agriculture like cultivation of rice and tapioca. The major cash crops raised by them are arecanut, pepper, ginger, turmeric, cashew etc. Kanikkar who prefer to reside in areas outside the reserve forest have improved much in their lifestyle while those living in the interior forests called 'Malamkanis' are still deprived of the basic amenities of life.

There are 5872 Kanikaran families spread over 48 local bodies in 7 districts. As their population is 19455 the family size of Kanikaran community is 3.31. The population consists of 9212 males and 10243 females with a sex ratio is 1 \: 1.11 which is higher than the state average. Kanikaran community is mainly distributed in 8 Grama Panchayats in Thiruvananthapuram and Kollam Districts. Vithura(3575), Peringammala (2650), Tholikkod (2425), Pangode(991)Amboori (1811) and Kulathupuzha (1956) are the Grama Panchayats which have sizable population of Kanikkar. Nearly one fifth of Kanikkar community is settled in Vithura Grama Panchayat. When compared to other Scheduled Tribe communities, Kanikaran have come into the process of urbanistation.

2.3 Objectives of the Study

To examine the financial inclusion services provided by the banks and its awareness among the selected sample of the tribal population in Thiruvananthapuram district of Kerala.

3 Research Methodology

To meet the objectives of the study, the methodology adopted included both primary and secondary data. Secondary data sources comprised of official publications from national and international agencies which is further substantiated with official statistics. Primary survey was conducted in Kanikkar dominated panchayats like Vithura, Peringammala, Tholikkode, Pangode and Amboori.

Table 1: Details of Sample Selected for the Study

Name of Panchayat	Number of Families	Sample Selected
Vithura	3575	107
Peringamala	2650	80
Tholikode	2425	73
Pangode	991	30
Amboori	1811	54

A descriptive research study was undertaken with a total number of 403 respondents spread equitably over the Kanikkar inhabited regions of Thiruvananthapuram district.

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3.1 Analysis and Findings

Key elements that influence financial inclusion in the study area can be depicted in the diagram given on 1.

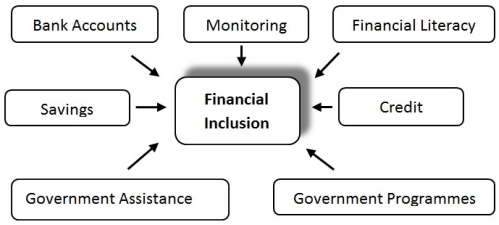

Figure 1: Determinants of Financial Inclusion

From the study, it is observed that in the study area there exist both public sector and private/new generation banks which imply that the supply side part of the banking sector is taken care of as there are sufficient number of banks to cater to needs of the tribal communities. Moreover, the banking officials are also appeared to be more enthusiastic in taking part in the Financial Inclusion drive of the Government of India. But the most important part is that about 92 percent do hold an account and as per the United Nations views anything more than 91% coverage can be regarded as cent percent. Hence it can be opined that in the capital district of Kerala, the financial institutions have achieved their envisioned objective.

But from a closer perusal, it can be observed that the credit for ensuring financial inclusion doesn't goes to the financial institutions, but to the Government sponsored Mahatma Gandhi Rural Employment Guarantee Programme (MNREGS). For the enrollment under the MNREGS programme, it has become mandatory for the beneficiary to open a savings account through which their remuneration will be paid. Through the order No: J-11011/1/2009-MNREGA, Ministry of Rural Development, Government of India had decided to increase the central funding for securing up to an additional 50 days of wage employment beyond the stipulated 100 days per Scheduled Tribe households living in the forest areas, provided that these households have no other private property except for the land rights provided under the Forest Rights Act, 2006. This further enhanced the enthusiasm among tribal communities to open an account.

From the table 2, it can be observed that Peringamala and Vithura Panchayts which are comparatively developed regions in Thiruvananhapuram district had achieved a better performance in financial inclusion programmes than others. Along with the nationalized banks, private sector banks like Federal Bank had played an important part in this endeavour. One of the main defects noticed in this study is that the Co-operative banks like Thiruvananthapuram District Co-operative Bank and Kerala Gramin Bank, the leading Cooperative banks in the region had only very limited role in the financial inclusion programme. It can be opined that the Co-operative movement in Kerala which was once considered as the most powerful people initiatives has now caught in the web of political quandary where we can witness a shift in priority from public to power.

But Government of India had even asserted that MNREGS is not a permanent employment generating programme, but a transition programme for 20-25 years period in regions, where there is still demand for distress employment. But the only highlight of this programme is that it had contributed to an increase in rural wages, which has in turn contributed to decline in rural poverty levels which includes tribal communities as well. Hence in reality MNREGS should not be taken into consideration while judging the effectiveness of the financial inclusion activities of financial institutions.

The study observed that there exist a range of factors that had acted as a deterrent against the opening of a bank account by the tribal communities. The study infers that the nature and forms of exclusion and the factors responsible for it are wide and varied. Hence no single factor could explain the real phenomenon, which is in conformity to the views of Sinclair (2001). The problems faced by the tribal communities\' ranges from identity requirements, terms and condition and charges of banks, physical access problems and psychological barriers.

- Identity requirements: People belonging to the lower strata of the population find it difficult to provide the types of identity proof required by banks to open an account. This has been further aggravated by steps taken by governments and the banking industry to combat money laundering and terrorism. Banks now routinely require both proof of home address and photographic identification before they open a bank account, with passports and driving licenses being the most widely accepted. People without either of these often face real difficulties finding alternatives.
- Terms and Conditions: A range of different types of terms and conditions deter or prevent people with low incomes from opening an account. The nature of these barriers differs between countries although there are clearly similarities between them. In France, Canada, the USA and Australia, attention has been drawn to the minimum amount that is required for an account to be opened. In many cases, these opening balances are beyond the budgets of people on low incomes.

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Table 2: Details of Financial Account Holders

Region	No Account	Savings Bank Account	MNREGS Account	Savings \& MNREGS Account
Vithura	9	19	56	23
Peringamala	7	19	34	20
Tholikode	6	19	29	19
Pangode	3	9	15	3
Amboori	5	9	34	6

- Cost of Holding a Bank Account: Another important faced by the financial inclusion programme is the conditions relating to the use of the accounts. In Belgium, for example, accounts have been closed by banks because customers either use them too little or withdraw the money in the account too soon after it has been deposited. In other countries like India, banks impose penal charges if a minimum balance is not maintained. Moreover, transaction charges also act as a deterrent against the opening of new accounts.

- Geographical Barrier: Increased competition and the economics of international banking have led to programmes of bank branch closures across most developed countries. Technological developments (cash machines and telephone and internet banking in particular) have accelerated this trend. Moreover, it is clear that these closures tend to hit poor urban neighbourhoods and small rural communities quite disproportionately.

- Psychological Barriers: Research has shown that many people on low incomes feel quite disengaged from banking. The types of barriers noted above fuel their belief that banks are not really interested in the needs of people like them and that the services offered are not appropriate to their needs. As a consequence, in many countries (and especially those with higher levels of banking exclusion) self-exclusion by people on low incomes is far more important than direct exclusion by banks refusing to open accounts.

- Bureaucratic/Political Barriers: People with low incomes are either refused an account outright or advised to go to another bank despite law for strengthening the right of access to a bank account. Indeed people on low incomes faced difficulties opening an account even when they were assisted by charitable or consumer organizations.

Based on the above study, the challenges in financial inclusion faced by the financial institutions in the tribal hamlets of Thiruvananthapuram district can be depicted as in .

But the views expresses by the financial institutions are in contrary to the field survey undertaken in the Thiruvanathapuram district. Hence it can be view that their exist a wide gap between the service provider and the beneficiaries. Bridging the gap quickly expediently will go a long way in eradicating poverty from the tribal communities.

4 Conclusion and Suggestions

Low utilisation of banking facilities can result from policies aimed at improving the percentage of people with an account without addressing the underlying reasons for them being unbanked. The decision that wages and/or all state benefits and pensions would be paid into a bank account before addressing the need for accounts that were appropriate to the needs of people on low-incomes. This can have the desired effect of encouraging people to open an account, they often withdraw all their income as soon as it is received and continue to operate a cash budget. The solutions to combat banking exclusion are just as widespread.

- The most common response is the introduction of voluntary charters or codes of practice, developed by the banks themselves, through their associations and associates.

- To enact legislation defining the right of access to basic banking services.

- There is a need for low-cost no-frills accounts as the increase in the breadth and complexity of banking services has undoubtedly contributed to banking exclusion. Simple products, on the other hand, help ensure access to people on low incomes whose needs tend to be more

- Not-for-profit organizations can have an important role to play. Levels of banking exclusion tend to be lower where not-for-profit organisations, such as post offices, play a role in delivering banking services. This is partly because, compared with banks, they have a much

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Table 3: Challenges faced by Service provider in Financial Inclusion

Challenge	Extremely High	High	Moderate	Low
Identity requirements	x			
Terms and Conditions		x		
Cost of Holding a Bank Account		x		
Geographcal Barrier			x	
Psychological Barriers			x	
Bureaucratical/Political Barriers			x	

Table 4: Challenges faced by Beneficiary in Financial Inclusion

Challenge	Extremely High	High	Moderate	Low
Identity requirements	x			
Terms and Conditions	x			
Cost of Holding a Bank Account	x			
Geographcal Barrier			x	
Psychological Barriers		x		
Bureaucratical/Political Barriers		x		

larger network of outlets and partly because poor people see them as more user-friendly.

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The Impact of Social Responsibility Disclosure and Financial Performance on Corporate Value at Mining Sector Entities in The Indonesia Stock Exchange

Dwi Asih Haryanti
Economic Faculty, Gunadarma
University, Jakarta, Indonesia
dwi_asih@staff.gunadarma.ac.id

Sugiharti Binastuti
Economic Faculty, Gunadarma
University, Jakarta, Indonesia
tuti@staff.gunadarma.ac.id

Ashur Harmadi
Economic Faculty, Gunadarma
University, Jakarta, Indonesia
ashur@staff.gunadarma.ac.id

Abstract

This paper examines the question of measurability of the impact of Corporate Social disclosure and Financial Performance, on Corporate Value at mining sector in the Indonesia Stock Exchange. Disclosure of social responsibility in Indonesia based on Law No. 40 of 2007 on Limited Liability Company, which stated that the Company that has been in business in the field and or related to the natural resources required to implement social and environmental responsibility -corporate social responsibility (CSR). Financial Performance factors in this paper made by proxy by current ratio (CR), debt to equity ratio (DER), return on asset (ROA), and return on equity (ROE). Corporate value described the investor perception of issuers, made by proxy with Price Earning Ratio (PER). Analysis using regression and of the results showed that the current ratio (CR) and corporate social responsibility (CSR) has no infuence on corporate value, while the debt-to-equity ratio (DER), return on assets (ROA), and return on equity (ROE) influence on corporate value.

Keywords :Corporate Social disclosure (CSR), Financial Performance, Corporate Value

1 Introduction

The obligation to implement corporate social responsibility (CSR) based on Law No. 40 of 2007 on Limited Liability Company. Corporate social responsibility (CSR) involves policy, programs, and spent cost. CSR means social and environmental responsibility to get involved in developing sustainable economy to increase the quality of beneficial life and environment, for either the company, surrounded community, or citizen.

The idea of CSR based on the reason of the corporate's responsibility not only in economic and legal side toward its shareholder, but also in social responsibility toward stakeholder. Social responsibility of a corporate occur among the corporate and the whole stakeholder include its customer, employee, surrounded community, owner or investor, government, supplier, and even its competitor.

A company's financial report provide information about financial balance and performance of a company at a certain operating period, as well as the accountability of resources management entrusted to the company. The financial report resulted from the financial accounting process which is used as a tool for financial communication and company performance measurement. The assessment of company's performance in general use fundamental factors that include financial ratio dan internal financial characteristics (Weston, J. Fred and Thomas E. Copeland. 1992). Financial ratios used in assessing the performance of a company are (1) liquidity ratio, (2) leverage ratio, (3) profitability ratio dan (4) market value ratio.

Liquidity ratio is made by proxy by current ration to measure company's ability to meet its short term obligation to creditors. Company with high liquidity will do more complete financial disclosure in order to make the external parties know that the company is credible. Current ratio is the ratio of

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current assets and current liabilities. Leverage ratio is the ratio that is used to measure to the extent of the company's asset financed with debt, how big the debt burden of the company compared to its asset.

Leverage Ratio made by proxywith Debt to Equity Ratio, this ratio is used to assess the ratio of debt to capital that is useful to know the amount of funds as loans (creditors) by the owner of the company. Profitability ratio made by proxy by profitability ratio, its the ratio that measures company's ability to generate profits at the level of sales, asset and capital. Proxy liability ratio is the Return On Investment (ROI), Return on Equity (ROE). Results of return on equity is a profitability of capital is ratio to measure net income after tax to capital. High profit margins will encourage managers to provide more complete information in order to convince investors about the performance of management and encourage management to obtain compensation for the achievements.

Market value ratio, according to Keown, et al. (2007) is the value of the company, is the market value of debt and equity company securities that is circulated. The company's value can be measured by the Price Earnings Ratio (PER) i.e. the price buyers are willing to pay if the company was sold. According Tandelilin (2010) PER approach is a more popular approach used in the analysis of stock and practitioners. PER approach also called multiplier approach in which investors will count how many times the value of earnings that are reflected in the price of a stock. The value of the company is investor's perception of the company that has always been associated with the stock price. High stock price made the value of the company is also high. High value of the company which will be followed by high prosperity of the shareholders (Brigham and Houston, 2006).

2 Research Methodology

In this research the data used is secondary data gotten from Indonesian Stock Exchange website and companies website. The sampling companies were mining companies registered in Indonesian Stock Exchange and published their annual report for seven period continually from 2007 to 2013 and not loss company. The research variables are as table 1.

2.1 Corporate Social Responsibility

Corporate Social Responsibility Disclosure Index (CSRDI) based on Global Reporting Initiatives (GRI). Based on GRI standard, there are six disclosure indicators namely: economic performance, environment performance, labor, human rights, societies, and product's responsibility. In this research, it is used 83 disclosure items namely economic performance indicator that has nine items, environment performance indicator that has 30 items, labor and appropriate work indicators and that have 14 items, human right indicators that has 11 items, and product's responsibility indicator that has nine items. CSR is accounted using formula below.

$$CSRi = \frac{\sum xij}{nj}$$

CSRi = corporate social responsibility index of j company

$\sum$xij = total items disclosure by j company

nj = total items for j company (every disclosured item is given score 1 and closured items is given score 0)

2.2 Hypothesis

- Ha1 : Corporate Social Responsibility influence the corporate value
- Ha2 : Current Ratio influence the corporate value
- Ha3 : Debt to Equity Ratio influence the corporate value
- Ha4 : Return on Assets influence the corporate value
- Ha5 : Return on Equity influence the corporate value

2.3 Data Analysis Technique

Data analysis was executed after getting data by using multiple linier regressions.

3 Result and Discussion

Based on the result analysis, it is concluded that corporate social responsibility and current ratio does not influence the corporate value. Corporate social responsibility must be executed by the company that has business field in natural resources or other field that still related to natural resources namely mining industry. It makes the investor do not give attention on the responsibility of the company. Current ratio does not affect the value of the company, because investors not only pay attention to the company's ability to meet its short term obligations, but also generally pay attention to the company's ability to meet short-term and long termobligations, which can be seen from the leverage ratio.

Current ratio does not affect the value of the company, because investors not only pay attention to the company's ability to meet its short term obligations, but generally pay attention to the company's ability to meet short-term liabilities and long

Table 1: Research Variables

Kinds of Variable	Proxy	Scale	Measurement
Social Responsibility Disclosure	Disclosure Index	Numeric	Scoring (dummy variable)
Liquidity	Current ratio	Ratio	Current asset/current liability
Leverage	Debt to Equity Ratio	Ratio	Total Liabilities/Total Equity
Profitability	Return on Assets	Ratio	Profit Before Income Tax/Total Assets
Profitability	Return on Equity	Ratio	Profit Before Income Tax/Total Equity
Corporate value	Price Earning Ratio	Ratio	Price per share/earning per share

term, which can be seen from the leverage ratio. Leverage ratio which is made by proxy with the leverage ratio Debt to Equity ratio influence the value of the company. The addition of debt may increase the company's ability to earn profit, because there is moreavailablefund for operations. Profitability ratio whichis made by proxy with Return on Assets and Return on Equity influence the value of the company. Profitability is ratio that can represent the company's financial performance, in which increasing the company's financial performance will improve the return the investors' income. Investors will try to find companies that have the best performance and invest their money in the company by buying the shares.

4 Conclusion and Suggestions

Based on the results of the analysis, it can be concluded that corporate social responsibility and the current ratio does not influence the value of the company while the Debt to Equity, Return on Assets and Return on Equity influence the value of the company. The following research may be executed on company whose main business is not in the field of or related to natural resources, so the implementation of corporate social responsibility will vary.

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Exchange Rate, Insurance Industry, and Indonesian Economic: Proposed Research Model

Hardjono
Doctoral Degree in Economic,
Gunadarma University
hardjono@marein-re.com

Abstract

Currency exchange rates may influence insurance industry and both may contribute to the economic growth. The paper discussed the long run relationship between currency exchange rates, insurance industry and economic. Multiple linear regression model is performed to analyze data. It is expected that the following research objectives are confirmed: (1) currency exchange rate is positively related to insurance industry performance; (2) there is a relationship between insurance industry performance and gross domestic product (GDP); and (3) both currency exchange rate and insurance industry performance relate to gross domestic product (GDP). The proposed paper will construct a study in nature in order to provide deep insight the relationship among the three variables from the point of view of previous researches and studies.

Keywords :Exchange Rate, Insurance Industry, Economic Growth, Granger Test, Cointegration Test

1 Introduction

The first Indonesian Insurance Law was introduced in February 11.1992 and had been revised in 2014. Previously insurance contracts were subject to "kitab undang-undang hukum dagang" (trade law book), subscribed from Deutch / Netherland Law. Insurance Industry is a part of financial services institution which has a significant role to collect funds from the society in which finally to finance economic development. By intermediating society's savings and allocating them to their best uses, financial systems have a critical function for economic growth but financial sectors can also be a source of fragility (Beck, 2012). Sepehrdoust and Ebrahimnasab (2015) state that "Insurance is an instrument for managing and coping with risk and replaces the uncertainty of loss occurrence at a lower cost."

The importance of the insurance industry in the economy has been well recognized. Several studies have been conducted to examine the nature of the relationship between insurance and economic growth in the developed countries and other region of the world. Liedtke (2007) stated that insurance is an important factor of economic development and play more fundamental role in modern society. However, it is not many study have been conducted in Indonesia on relationship between currency exchange rate, insurance and economic development. In this paper, it will provide a summary of the findings of the existing studies on the relationship between currency exchange rate, insurance and economic growth mostly literatures done in developed countries due to few studies done on this topics in Indonesia.

Arena (2006) stated that insurance market activity, both as a financial intermediary and a provider of risk transfer and indemnification, may contribute to economic growth by allowing different risks to be managed more efficiently and by mobilizing domestic savings. Petrova (2015) stated that positive cointegration relationship between the insurance sector and economic growth has been found where the life insurance is of greater importance to developed countries; meanwhile, for the developing countries non-life insurance plays a more significant role. The research results of Bednarczyk (2013) show that insurance development, as a part of financial development, provides a positive effect on long-term economic growth. Valickova, Havranek, and Horvath (2014) stated that financial development may have different growth effects in different regions and in different times. Kugler and Ofoghi (2005) show a long run relationship between insurance market size development and economic growth rather than a cyclical effect.

Indonesia showed an increase in insurance premiums, but the IDR exchange rate declined in recent years. Gross premium, currency exchange

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rates and Gross Domestic Product data for the year 2009 -2013 are shown in table below.

Year	Gross Premium (in trillion IDR)	Exchange Rates	GDP(in trillion IDR)
2009	106.45	9,404.00	5,613.44
2010	125.12	8,991.00	6,422.90
2011	153.13	9,068.00	7,427.10
2012	175.89	10,025.39	8,241.90
2013	193.06	12,189.00	9,084.00

Source: *Insurance Statistics of Indonesia (2013)*

Table 1: Gross Premium, currency rates, and GDP in 2009-2013

Meanwhile the number of insurance and reinsurance companies in Indonesia is 144 companies in 2009; 141 companies in 2010; 139 companies in 2011; 140 companies in 2012 and 141 companies.

The objective of the study was to provide literature review of previous research and studies related to relationship between currency exchange rates and insurance industry, currency exchange rates and economic growth, and insurance industry and economic growth. Based on theoretical framework and previous research review, the proposed research model was formed and presented at the end-section of this paper.

Literature Review

Marrewijk (2005) explained a four basic theory of exchange rate. First the elasticity and absorption approach which focused on the relationship between exchange rates and the current account balance. Second, the (long-run) implications of the monetary approach which emphasizes the fact that the exchange rate is the relative price of two monies so that the demand for money therefore plays an important role in the adjustment process and in determining exchange rate levels. Third, the short-run effects of monetary and fiscal policy under various economic conditions where the short-run implications of monetary and fiscal policy was different under different exchange rate regimes and varying degrees of capital mobility. Fourth, the transition from short-run to long-run in a sticky-price model with rational expectations. The last theory model provides a bridge between short-run and long-run analysis.

A lot of works have been done to examine the contribution of financial intermediations to economic growth. Theoretical models have been setup to explain the role of financial markets, including insurance industry. Function of insurance is to reduce risks and other volatility of financial stability. Skipper (1997) summarized that insurance increases financial stability, promotes commerce and business, is related to savings mobilization, assists with better capital management through better information, and introduces economic interest to reduce losses. As a gear of the financial engine, the insurance industry fosters economic growth, working in tandem with other agents and regulatory institutions (Concha and Taborda, 2014). Apart from providing protection an insurer can affect the economic growth in the form of financial intermediary (Curak et al., 2009).

Shafik and Jalali (1991) relativized the view that high interest rates are associated with low economic growth in developed economies. For economies with lower development this factor is less relevant. According to Han et al. (2010), in relation with contribution to economic growth, the overall insurance development in the developing country, life insurance and non-life insurance development play a much more important role than they do for the developed economies. Guochen and Wei (2012) stated that, based on a cross-region study, patterns of interaction between insurance development and economic growth varies according to different level of income. Based on study in India, Verma and Bala (2013) summarized that life insurance significantly influences the economic growth. Haiss and Sumeji (2006) found weak evidence for a growth supporting role of life insurance based on data from 29 European countries over the 1992 to 2004 period.

Adams et al. (2005) examined the dynamics and historical relation between banking, insurance and economic growth in Sweden in the period from1830 to1998. They stated that the insurance market appears to be driven more by the pace of growth in the economy rather than leading economic development. Concha and Taborda (2014) performance empirical assessment of the relationship between the use of insurance and economic growth in eleven Latin American countries from 1980 to 2009 and the result show the financial sector-economic growth relationship is vast.

Umar et al. (2015) concluded that insurance premium and value of stock transaction have a positive impact on economic growth in both short runs and long-run in Nigeria. Peter, Uzowuru, and Gospel (2015) examine the causal relationship between insurance sector development and economic growth in one country. They use econometric method to evaluate the insurance development and economic growth in Nigeria with equation as follow:

$$GDP = b_0 + b_1 NIC + b_2 PLI + b_3 NLP + b_4 TII + b_5 INF + U$$

Where GDP is Gross Domestic Product; NIC is number of insurance company; PLI is premium of Life Insurance Company; NLP is premium of non-life insurance company; TII is Total Insurance Investment; and INF is inflation rate.

Akinlo (2015) used the annual data for a panel of 30 sub-Saharan Africa Countries to analyzed causal relationship between insurance and economic growth. He stated that there is no stable long-run relationship between insurance and

economic growth and there are a bi-directional causal relationship between insurance and economic growth. The general equation of autoregressive process for data panel used by Akinlo can be seen in the following equation

$'Y_{it} = \mu_i + \tau_i t + \sigma_i' Y_{it-1} + \varepsilon_{it}$

Where t is number of periods, i is number of countries,μ_i is the country specific fixed effect, σ_i is an autoregressive coefficient; and ε_{it} it is error term.

Proposed Research Model

One of the most important things is availability of proper macro economic data. The availability of data is a factor behind successfully of the research. This study is empirical by nature as is based on secondary data. The data would be compiled from Indonesia Financial Services Authority (IFSA or Otoritas Jasa Keuangan/OJK) and Indonesia Statistics Central Bureau annual reports. The variable GDP as proxy for economic growth is taken as dependent variable. The independent variables of the study are insurance industry and currency exchange rate covering the time period from 1994 to 2014. The proposed research model can be seen in the following regression equation:

$GDP_t = \beta_0 + \beta_1 IV_t + \beta_2 EX_t + \beta_3 SI_t + \varepsilon$

GDP is Gross Domestic Product (in IDR), IV is insurance variable which measured by premium underwritten in a given year, EX is exchange rate (IDR to USD), and SI is sector of insurance (life and general) as dummy variable. The research hypotheses are: (H1) there is significant relationship between currency exchange rate and insurance industry; (H2) currency exchange rate significantly affects GDP; and (H3) insurance industry performance significantly affects GDP. The research also will used Granger Test to examine causality relationship between insurance industry and economic growth and Johansen Coitegration Test by examining the number of independent linear combinations (k) for an m time series variables set that yields a stationary process.

The multiple linear regression model will be taken as statistical tool for data analysis. This research estimates and analyses the relationship between currency exchange rate, insurance industry, and economic growth for Indonesia. Using multiple linear regression estimate model, it is expected that the following research objectives are confirmed: (1) currency exchange rate is positively related to insurance industry performance; (2) there is a relationship between insurance industry performance and gross domestic product (GDP); and (3) both currency exchange rate and insurance industry performance relate to gross domestic product (GDP).

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Innovative Component of The Business Environment as a Factor in Enhancing Economic Growth in Uzbekistan

Alisher Abdullaev Mahmudovich
Ph.D., assistant professor Tashkent
Automobile and Road Institute,
Uzbekistan
iqtisodiyot_bosh@mail.ru

Abstract

The multiplicity of theoretical approaches to the category of innovation, the ambiguity of their classifications, lack of a unified methodology in research, as well as uncertainty in the concept of innovation policies impede formation of a long-term strategy of techno-economic development of the country on the basis of introduction of innovative technologies. To achieve the goal of public policy in the field of development of the national innovation system it is necessary, first of all, to take into account the foreign experience of regulation of innovations, and strengthen government support and provide the mutual with the business sector of the economy the implementation of major innovative projects of national importance in the priority sectors of the competitive domestic and global markets, high-tech products; accelerate consolidation of scientific, educational, industrial activity for the cost-effective implementation of programs to improve the economy's competitiveness in the global market.

Keywords :innovative, business environment, economic, economic growth, uzbekistan

At the heart of the innovative development of the economy is the process of finding, training, creation, implementation and commercialization of innovations, i.e. ensuring the transformation of ideas directly to innovation. Modern competitive production is not possible without the full realization of scientific and technical potential, thus it becomes important not only the quantity but also the quality of the scientific and technical resources, improvement of the management of innovation, inventions support system. Innovative processes are inherent in each stage of historical development of society. With the accumulation of knowledge and experience to improve as a socio-political and scientific-industrial forms of interaction between business entities, regions and states. The result is that the role of innovation, their causes, dynamics, distribution mechanism, the impact on the economic growth and development have been actively investigated by scientists in the sphere of economists ([Lyasko, 2012]).

At the moment, Uzbekistan's economy is characterized by stratification, where each technological system is in a certain phase of their life cycle - the stagnation and decline, maturity, rapid growth or nucleation phase. This situation is due to several factors, including:

- there are risks;
- poor management of the innovation process;
- low percentage of production and innovation, as well as new technologies;
- lack of venture business development in the country;
- uncertainty in the legislative and regulatory sphere;
- low innovation activity of enterprises, lack of funding for research and development state and fuzzy diversification of financing innovation process()[Margianti et al.,].

The multiplicity of theoretical approaches to the category of "innovation", the ambiguity of their classifications, lack of a unified methodology in research, as well as uncertainty in the concept of innovation policies impede formation of a long-term strategy of techno-economic development of the country on the basis of introduction of innovative technologies. Whereby especially important becomes studying aimed at analyzing the degree of influence of innovation, actors of the business environment, on economic growth()[Kornai, Ya. et al, 2012]. At the moment, there are many options of classifications of innovation on various grounds, with some of their symptoms overlapping each other, and certain types of

innovation, selected for various indications, duplicate each other. Therefore, depending on the object and the subject innovation studies are considered as: process, result, system, change. In our view, innovation - is fundamentally new product or technology, which is the end result of purposeful innovation, bearing risky character. The innovation process - a process of successive transformation of ideas into a commodity through the stages of fundamental and applied research, experimental development, marketing, production, sales. Innovative activity of business entities is a mechanism for the development, creation and implementation of new products, services and technologies that will be the basis of the production activities of the company in the future, and their implementation will provide income and ensure the competitiveness of companies.

Analysis of the category “innovation” led to the conclusion that key criterion for classification as a criterion for the potential and the degree of novelty, which reflects the level of technical and economic progress of society and determines business cycles and waves. In general, the innovation process consists of several stages, including some sub-steps, in which the idea is transformed into novelty and innovation in itself. Today in the economic literature there are a number of opinions that innovation is a product, a commodity, good or public good. We agree with the authors who say that the public good may be the only social innovation and with some assumptions of epochal innovations. Innovation is a private good, provided the development of the product directly to goods sold on the market.

A characteristic feature of modern economic growth is the emergence and implementation of new breakthrough technologies using the latest achievements of science (so-called macrotechnologies), the formation of national innovation systems integrated on the meso and macro levels, and covers a range of institutions that accompany innovation and distribution of new technologies. Availability of macrotechnologies is a kind of indicator of scientific and technological development of the country, the inflow of foreign capital, acceleration and strengthening of relationships with the world’s innovative markets, increase the competitiveness of the country.

At the heart of macrotechnologies lie technological processes, predominantly without taking into account social technologies, the development of human capital. It is a technology designed to change the technological base of the country. Up till now, the leading countries in the macro-technologies are the USA, Germany, Japan.

However, along with the macro-technologies meta-technology should also be distinguished, specificity and the key feature of which is that the very fact of their application automatically makes any party impossible to use them all compete with the developers of these technologies.

Meta-technologies are focused on the impact directly on the person, and only through him and with his help - to impact and transform the technological basis of the economy. It should be noted that the technical and economic development of the global economy suggests that the basis of the change of technological modes are radical product and process innovations, without the use of the latest technologies in the management of human capital, resulting in fifth technological structure built on the use of the technology of the industry *high-tech*.

Therefore, developing the sixth technological order, which is in its infancy in Uzbekistan, should be based on the use of technology not only high-tech, but with the inclusion of meta-technology. In this regard, it is necessary to develop a national system of priorities, not only in the field of critical technologies, but also in the field of advanced methods of human capital management and its application to determine the mechanism of interaction with the world market of high technology products through the development of fundamental and applied sciences, as well as the mechanism of commercialization and technology transfer, which will develop an efficient and competitive industry, technological independence and economic security of the country. Monitoring the dynamics of the market for innovation led to the conclusion that the domestic market innovation is a set of organizational and economic relations arising in the process of exchange of product innovation participants in the innovation process in mutually beneficial proportions. As a consequence, innovative products coming to the market innovation and past commercial exchange, act as a commodity()[Arsenev and Davydova, 2013].

In our opinion, in modern Uzbekistan innovation market is at an early stage of development and has a number of features associated with the state of the economy. In general, market innovation can be divided into several major players: industrial companies, venture capital technology funds, state funds to support R & D and innovation, foreign companies, small innovative firms.

Large national companies of Uzbekistan independently invest in technology, and create a fund specializing in new technologies. These companies include the National Holding Company “Uzbekneftegaz” Uzpharmsanoat, Association “Uzpahtasanoat”, National Airline “Uzbekistan Airways”, Joint Stock Company “Uzavtosanoat”, State Joint Stock Railway Company “Uzbekistan Railways”, “Uzbekenergo”, “ Uzbekengilsanoat “each of which conducts research for its industries directly related to the core business, supported by relevant scientific research institutions.

The next segment of the market comprise a few venture technology funds.

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The third subject of market innovation is represented by public funds and a number of targeted programs to support business innovation, funding various stages of development of innovative business. Also, innovative market participants are international corporations engaged in buying technology and business, enticing prospective scientists and specialists, as well as opening their own specialized research centers([Kurpayanidi, 2014]).

Another potentially promising participant in the innovation sector in Uzbekistan could become major foreign technology venture capital funds. These are well-known leaders of the world business venture as Moorgate Capital Management, Intel Corporation, Oracle Venture Fund, Baring Vostok Capital Partners, Kleiner Perkins, Caulfield Byers, Accel Partners, New Enterprise Associates and Draper Fisher Jurvetson([Guryanov, 2012]).

At the present time in the world an increasingly important role in the financing of science (including fundamental) research and acquire endowment funds or endowment funds, the aims of which are financial stability and development of the grantee, social infrastructure, development and diffusion of innovations. The greatest success of endowments received in the United States of America, where they function at the universities, and in 2014 about 80 funds crossed the threshold of 1 billion US dollars, and the largest fund, owned by Harvard University in 2009 was about 30 billion. US dollars([Anonymous,]).

To achieve the goal of public policy in the field of development of the national innovation system it is necessary, first of all, to take into account the foreign experience of regulation of innovations, and strengthen government support and provide the mutual with the business sector of the economy the implementation of major innovative projects of national importance in the priority sectors of the competitive domestic and global markets, high-tech products; accelerate consolidation of scientific, educational, industrial activity for the cost-effective implementation of programs to improve the economy's competitiveness in the global market. In our opinion, it is necessary to adhere to the concept of synthesizing neoinstitutional and evolutionary approach, along with the implementation of structural, investment, monetary and fiscal policies in order to achieve socio-economic development, enhance its competitiveness, provide economic security and economic growth.

1 Methods

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Determinant and Performance of Bank Lending for Small Business in Indonesian Rural Bank: Proposed Research Model

Abdul Rani Rasjid
Doctoral Program in Economics,
Gunadarma University
abdulranirasjid@gmail.com

Abstract

The rural bank or BPR (Bank Perkreditan Rakyat) is a type of bank that focuses on lending to micro and small enterprises in Indonesia. According to Bank Indonesia report, the performance of their loan portfolio is relatively low compared to conventional banks, particularly the cost-efficiency and non-performing loans. The purpose of this study was to determine the factors that affect the performance of bank lending to small businesses. Development of theoretical models refers to research of Cyril and Wansley (2009) and Berger, Cowan and Frame (2011) by adding a new variable called Cost of fund, two types of measurement of performance of bank lending as well as bank characteristics as control variables.

Keywords :Rural Bank, small business, Cost of Fund, CAR, NPL, LDR, ROA

1 Introduction

Bank Indonesia Regulation stated that the rural bank (or BPR) is a bank conducting conventional business or based on sharia principles that do not provide payment system services in their activities. Their business activities are primarily intended to serve small businesses and communities in rural areas. Herri et.al (2007) stated that the rural banks have important role in micro and small business financing based on increase in Loan to Deposit Ratio and increase in number of customer. Financing by rural bank has contributed to enhanced of micro and small business performance.

According to amendment of National Budget for 2015, the growth of Indonesian economic is estimated for 6.5%, eventually, its growth is only 4.6%, most of the growth is supported by SMEs growths. Most of SMEs run their businesses without help from any government institutions whatsoever. Business in Indonesia, in particular SMEs, is less developed due to higher working capital and higher credit interest rate for SMEs. Credit interest rate for SMEs in Indonesia is 21.5% annually (Biro Pusat Statistik, 2015). And assumption for used interest in 2016's National Budget and Spending as expressed by the President Mr. Joko Widodo on Friday, August 15, 2015 is 5.5% and BI Rate is 7.5%. Indeed, the government plans to set interest rate for SMEs for 12%, and the interest rate for SMEs shall be realized by providing interest subsidy for 900 billions Rupiah from the government, it turns out that there is no allocation in 2015's National Budget and Spending. Until this moment, the government expects 12% interest rate for SMEs.

One financial institution that has the main task in the development of small businesses related to the financing aspect is a Rural Bank. In the future Bank Indonesia will develop the rural banks into community banks. Until August 2014, the number of rural banks in Indonesia as many as 1644 bank with total assets of 96.4 Trillion Rupiah. The amount of funds raised as much as 79.9 Trillion and loans amounting to 74 Trillion Rupiah (Bank Indonesia, 2015). BPR's performance can be seen from several financial indicators, which is an average Capital Adequacy Ratio (CAR) of 27.89%, loan to deposit ratio (LDR) of 81.02%, Cost efficiency of 82.45%, Return on Assets (ROA) of 2.74%, Return on Equity (ROE) of 24.77%, and Non-Performing Loans (NPLs) amounted to 6.05%. Compared with conventional banks, rural banks show better financial performance for the indicators ROA (2.74% compare to 2.30%), but the NPL worse (6.05% compare to 2.76%) and a lower cost efficiencies (82,45% compare to 81.46%).

Bank Indonesia (2011) stated that the development of rural banking industry in the future will be directed to the concept of Rural Bank as Community Bank who have a deep understanding of the character, the needs of customers and business conditions of communities which served by The Ru-

ral Bank, and also has products and services that are designed according to the needs of customers and society in The Rural Bank environment. According to Bank Indonesia (2014), In order to grow and thrive, BPR management should have a proper business strategy, such as: (1) Focusing on the financing of productive activities of micro and small scale with wellknown character, as well as the determination of competitive and affordable lending rates; (2) Serving the needs of SMEs to establish the bank's terms and procedures that quite simple and fast and use Information Technology in its operations in order to improve the quality of service which is much faster and more efficient; and (3) Develop a network of offices as needed. This paper describes the various factors that affect the performance of bank lending to small businesses that includes Cost of Fund (COF), cost efficiency, Loan to Deposit Ratio (LDR), Capital Adequacy Ratio (CAR), and other characteristic of Rural Bank in Indonesia.

2 Literature Review

Rengasamy (2014) stated that there was a positive effect of Loan to Deposit Ratio (LDR) to the Return on Asset (ROA) of the banks. Kuo et.al (2010) state that there is a positive correlation between the loan ratio and bank performance and that it is beneficial for banks to exploit the loan market. Suryanto (2015) focused on several factors and its effect on the Non Performing Loan. The determinants are bank size, Capital Adequacy Ratio (CAR), cost efficiency, loan interest rate, and liquidity (LDR). His research found that bank size, CAR, and cost efficiency, loan interest rate, and bank liquidity simultaneously can affect the credit crunch.

An important determinant of mortgage rates, or indeed any lending rate for household or business, is a bank's cost of funding (Wong, 2012). Zimmer and McCauley (1991) defines the cost of capital for bank as the fee or net spread between bank borrowing and lending rates that a financial product must generate in order to increase the market value of the bank. Kroszner (2013) stated that debate aboout differentials of bank funding cost become a central point of view in discussion of financial regulatory reform. According to Deans and Stewart (2012), the rise in funding costs reflects strong bank competition for deposits and higher spreads on wholesale debt reflecting an increase in investors' concerns about the global banking industry. Beck et.al (2011) state that there is no significant differences between developed country and emerging country on Small Medium Enterprise (SME) financing and there is no connection between organization structures dan loan technology that used by each bank, this is found on research that followed by 91 big bank from 45 countries, government banks and private bank. Cyree and Wansley (2009) state that 85% SME feel that they isn't served and 72% acknowledge failed on market competition this is based on research followed by 1000 bank that 393 of it given the answer.

Feakins (2004) state that there is significant variation on commercial banks especially in their approach and loan practice for SMEs. Her research based on intermediary finance role that is used by commercial banks on their interaction with SME in Poland. Cziraky, Tisma, and Pisavioric (2005) state that there is no positive correlation between size of bank and size of loan. Mitchell, Douglas and Pearce (2009) state there is implication of policy on minority SME, they suggest that policy maker give profit for each dollar that is paid by tax payer. Ogura and Uchida (2014) state there is positive impact on banks that consolidate especially on loan information.

Ely and Robinson (2008) state that there is increasing rumor with industrial consolidation bank that the awareness of SME will decrease especially on getting credit. JyrkiNiskanenand MerviNiskanen state that on 72 of 642 loan contract there is one covenant. Molina and Penas (2007) state that personal guarantee linked on time period longer than business guarantee. Vera and Onju (2010) state that small bank will participate on SME.

Grunner and Norden (2012) by using SME loan data from USA and Germany found that management capability and good character will have more attention on getting the loan. Levenson and Willard state that national survey on 1987-1988 there is only 2.14% from SME that don't get the loan from they that submit loan. Mudd (2013) state that loan for SME associated with good relation. Agostino and Trivieri (2014) using micro data state that SME that move in commerce will be easier getting information.

Credit scoring is associated with an initial increase in small business lending activity that moderates over time and no change in the quality of the loan portfolio (Berger, Cowan, and Frame, 2011). Their research used regression analyses to test the relationship between the quantity and quality of small business lending and bank profitability with general form can be seen in the following equation 1.

$$Y_{it} = \beta_1 SCOREVARS_{it} + \beta_2 BANKVARS_{it-1} + \beta_3 MKTVARS_{it} + \gamma_i + \delta_t + \varepsilon_{it}$$

where the dependent variable Y represents measures of the quantity or quality of lending or bank profitability. SCOREVARS relate to the use of credit scoring by community banks; Control variables for each bank (BANKVARS) are constructed for bank size, age, and financial condition; and MKTVARS measure the degree of local competition and market conditions.

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Brancati (2015) provides new insights on the role of relationship lending for small and micro-sized firms. The establishment of close ties between small)and micro) business with the lender bank can help overcoming financial barriers to innovation. The equationof Finacial Constraint takes into account several aspects of the credit channel, including controls for structural characteristics, credit supply, and demand, as following equation 2.

$$X_{2,it-1} = (Creditscore_{it-1},\ Tangible_{it-1},\ Profitability_{it-1},\ Rollover_{it-1},\ Size_{it-1},\ Age_{it-1}, \alpha_0, \alpha_{ind},\ \alpha_{reg})$$

where $X_{2,it-1}$ are vectors of exogenous parameters. credit score employed as a proxy for firm creditworthiness, Tangible is firm's tangible to total asset ratio, Profitability is firm's operating profit to total asset ratio, and Roll Over is firm's short term to the total debt ratio.

3 Proposed Research Model

This study uses secondary data to financial indicators of BPR and survey of credit manager regarding the performance of bank lending to small businesses. The research model was developed from research of Cyril and Wansley (2009) and Berger, Cowan, and Frame (2011). This model adds several new variables, namely Cost of Fund (COF) and the use of two types of performance measures, namely objective and subjective indicators. Other characteristics of the rural bank were placed as moderator variables, two of which are the location and the type of bank networking which refers to the framework of Bank Indonesia. The conceptual framework of the research model can be seen in the following figure 1.

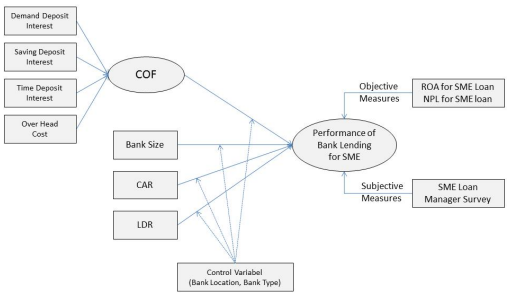

Figure 1: Conceptual framework of research model

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Woman on Board and Firm Performance: A Review of Empirical Research and Proposed Research Model

Sylvy Setiawan
Doctoral Program in Economics,
Gunadarma University
sylvy.setiawan@gmail.com

Abstract

Woman on board, which has been associated with and firm financial performance, is the primary focus of this study. This paper is the result of a meta-analysis of 20 empirical studies on the effect of gender diversity and other factors on company performance. Evaluation of previous studies were focused on the identification of a variety of predictor variables together with gender ddiversity that affect company's performance; a variety of performance measures used in those studies; and statistical analysis techniques performed to test the hypotheses. The predictor variable which was analyzed in addition to gender diversity is Good Corporate Governance. Various measures of company performance whics were widely used include Return on Assets (ROA), used in 6 studies; Return on Assets (ROE), 5 studies; Return on Invested Capital (ROIC), one study; and Tobin's Q, 5 studies. Results of this meta-analysis were used as the basis for the development of instruments and models of further research. The proposed study is focused on analyzing the influence of woman on board toward financial performance of insurance companies in Indonesia with the characteristics of the company and qualification of human resources as control variables.

Keywords :woman on board; gender diversity; financial performance; insurance industry

1 Introduction

The development of general insurance companies in Indonesia are very fast as indicated by the growth of assets by 374.83 percent and the premiums by 201.06 percent from 2006 to 2014 (the Indonesian General Insurance Association—AAUI, 2015). It is common that smaller percentage of women is found at the higher management levels. One of the levels in management that can determine the direction and strategic development of the company is the Board of Directors (BOD).

Labor force participation in Indonesia rank 109 out of 142 reviewed countries, based on The Global Gender Gap Report 2014 published by the World Economic Forum. Woman Board chair in Indonesia is 3.1 % while the highest is Turkey 11.1 %. The survey was conducted by Catalyst 2013. Referring to Weforum 2014, the percentage of woman on board in Indonesia is 6 %, while in another Asia Pacific countries were varied. These include Thailand (9.7%), Hongkong (9.4%), China (8.1%), Malaysia (7.8%), Singapore (7.3%), India (4.7%), Taiwan (4.4%), South Korea (1.9%), and Japan (1.1%). It is generally accepted that proportion of woman on board in Asia Pacific is substantially lower than man on board.

The primary focus is on diversity or composition of gender and other relevant factors associated with their impact on various company performance measures. One of the allegations against some of the differences in the results of these studies is the possibility that there are other factors or predictor variables that can strengthen the relationship between the woman on board and the company's performance. One such allegation is a factor of competence or qualification of human resources.

Study on Woman on Board aims to find a variety of predictors which, together with the main variables, namely Woman on Board, affect the performance of the insurance company. Results of this study will further be used as theoretical basis for developing research model and research instruments that will be applied to the insurance industry in Indonesia.

2 Review of Empirical Literature

Marimuthu and Kolandaisamy ([Marimuthu and Kolandaisamy, 2009b]) examine the effect of demographic diversity on Top Management Teams (TMTs) with regard to firm

financial performance using a diagnostic testing on multicollinearity effect to ensure the independent variables remain reliable in explaining the variation in the dependent variable while The dependent variable, consist of : Return on Asset (ROA), Return on Equity (ROE). While the independent variables : gender diversity and ethnic diversity in Top Level Management (TMT) were measured using a ratio scale , The control variables: TMT size was determined by the number of top managers, firm total asset was a measure for firm size, firm age refers to number of years of business operations and performance. Their results did not have any significant impact on firm financial performance. It seemed, though women's involvement at corporate level in large firms remained intact, however, they were unable to create impact on their firms' financial performance. In the same year Marimuthu and Kolandaisamy ([Marimuthu and Kolandaisamy, 2009a]), enlarge their study not only Top level management but refers to the Board of Directors (BOD). The purpose of their paper was the same to examine the effect of demographic diversity on top management team and Boards of Directors with regard to firm financial performance. The dependent variable and dependent variable was the same with their study before but BOD were measured using a ratio scale. The control variables is board size was determined by the number of directors sitting on the board. In the case of board of directors (BOD), demographic diversity partially influenced firm financial performance.

Hassan, Marimuthu, and Johl ([Hassan et al., 2015]), investigate a complimentary perspective, which is a diversity dimension at top-level management based upon upper echelon theory. Diversity comprises on demographic and cognitive dimensions. The independent variables are demographic & cognitive diversity dependent variable is firm financial performance. The control variables are board size, firm age and firm size. For the data analysis, techniques such as cross sectional and time series data, panel/pooled data analysis method.

Terjesen and Singh ([Terjesen and Singh, 2008]) were exploring the environmental context of female representation on corporate boards of directors, using logit regression. The dependent variable, the percentage of women on corporate boards is based on surveys of gender diversity on corporate boards. Three independent variables are taken from the United Nations Development Programmed Gender Empowerment Index (UNDP, 2006):

1. Percentage of females in the legislature, senior official and management positions;

2. Year that the first woman was elected to political office and

3. Ratio of earned income by females and males.

Ferreira ([Ferreira, 2010]), he is using two- or three-stage least squares, Generalized Method of Moments (GMM), and Dynamic Panel methods. Adams and Ferreira (2009) in his paper, report that firms with female directors are larger, have more business segments, have larger boards, have worse performance in terms of Tobin's q but better performance in terms of ROA, and have lower stock return volatility than firms without female directors. Adams and Ferreira (2009) in his paper suggest that female directors are significantly less likely to experience severe attendance problems. Furthermore, male attendance also appears to improve in boards with relatively more female directors. These results suggest that the addition of women to boards changes the behavior of all board members .Adams and Ferreira find that female directors are more likely to be appointed to audit, corporate governance, and nominating committees than male directors. Yet female directors are less likely to be appointed to compensation committees than male directors.Some firms would benefit from more diversity, but positive discrimination also exists, suggesting that some firms forgo profits in favor of a more diverse board. Research suggests that CEO pay is higher in firms in which directors are demographically similar to the CEO. Evidence also indicates that female directors are underrepresented in compensation committees that set CEO compensation .The research on board diversity is best used as a means to understand the costs and benefits of diversity in the workplace and to study corporate governance issues.

Women who have specialized knowledge and skill. This is the resource that is important in breaking the gender barrier. Women who are appointed to all-male boards have specialized knowledge skills; either they have firm-specific knowledge as insiders, or they are support specialist with a specific financial or legal expertise.Dunn ([Dunn, 2012]), is using statistics and correlations Logistic regression for the dependent variable male board, Five dichotomous variables (insider, specialist, business manager, generalist, and Influential and Control variable: board size and firm size.

Azmi and Barrett ([Azmi and Gand Barrett, 2013]) Focusing on gender diversity in an emerging economy is also important as this has the potential to provide insights about how cultural, economic and social attributes shape the impact of women's presence on board. The first dummy variable will be the board with no female directors. The second will be for boards with one female director and the third will be for boards with more than one female director. For the financial performance which is the dependent variable are:

1. Effects of Diversity on Boards: Gender, Propor-

tion of women to men on corporate boards, Ethnicity, Age.

2. Cognitive diversity: Knowledge, Skills and training, Experience.
3. Remuneration.
4. Role Duality.
5. Financial performance.

A managerial stereotype that is combining both masculine and feminine characteristics will affect the presumed role incongruity for female managers. It is clearly stress the importance of proximal variables (own gender and gender of manager) being stronger predictors than the more distal variable, management gender ratio. Stoker, Deer Velde and Lamer ([Stoker et al., 2012]) their study examines if the gender of an employee, the gender of the manager, and the management gender ratio in an organization are related to employees' managerial stereotypes using ANOVA. Variables were gender of the respondent, their age, their educational level, and the gender of their manager.

Virtanen (2012), she investigates gender differences on the corporate boards of Finnish listed companies. The personal characteristics, careers, and boardroom roles of female and male directors on boards were analyzed on the basis of empirical data collected by questionnaire. Personal characteristics : gender, age , marital status, number of children, education Career, career development and career satisfaction which 12 item using Wilcoxon rank sum test , firstly testing the differences between the respondents' personal characteristics and careers, and then the differences between their roles on the boards. And Roles on the boards which 12 item using Whitney-Mann U tests reveal some statistically significant differences between the roles of female and male board members. There is an indication that women in high positions are more flexible, more active, and take more pleasure in having and exercising power than their male counterparts. They make their presence visible, and have adapted well to acting on the male-dominated boards. These successful women have everything the men have: career, family, and power. Their flexible personalities, they are able to adapt to the structure of the boardroom, play an active role in the masculine environment, and adjust to new situations whenever necessary at home or at work.

Wellalage and Locke ([Wellalage and Locke, 2013]) investigate the link between female board directors and company financial performance and agency costs in Sri Lanka's publicly listed companies. Three variables were used as proxies for the gender diversity of the board of directors. The woman is present on the board and otherwise. The third variable measures board diversity, a measure widely used in ecology, genetics, linguistics and economics. Female board directors effect on financial performance. But the actual relationship between gender diversity and firm financial performance is still unsolved.

Luckerath and Rovers ([Luckerath and Rovers., 2013]) investigates the financial performance of Dutch companies both with and without women on their boards. Dependent variable is ROE, ROS and return on invested capital (ROIC) for the two groups of companies (with and without female directors). Independent variable are Constant, Total assets (log), Board size, Financial sector dummy, Female directors (dummy), Female directors (%). Their using regression analysis to further explore the relationship between ROE and the presence of female directors and for Control variables Both Catalyst (2007) and McKinsey (2007) compared means in Luckerath and Rovers([Luckerath and Rovers., 2013]), which involves a univariate analysis, testing one variable at a time.The relevant interval before or after the appointment of a woman on the board and the existence of a potential threshold (critical mass) needs to be considered in seeking evidence for building the business case for more women on boards. But, the contradiction in the results regarding the relationship between female representation on the board and both stockprice growth and total shareholder return needs further investigation.

Liable , M.C (2013) explore the effects of gender diversity in top management on firm performance in Germany using unique data from the Institute for Employment Re-search's Establishment Panel Survey and make the proposed theoretical framework for the gender diversity-performance relationship and focus on the moderating influences of the establishment and macro-levels. Dependent variable is the establishment's log business volume, operationalized as :

1. Turnover
2. Turnover per head, computed as turnover divided by the number of employees
3. Sales exclusive sales tax
4. Gross value added, which is calculated from the establishment's reported sales minus intermediates.

The key independent variable (women top) is defined as the share of female managersin top management positions on all managers in top management positions in 2008. The conclusion women in top management positions in German establishments can be negatively linked to firm performance.

Tim ([Ntim, 2013]) focusing on Board diversity, Ethnicity and gender. Independent variable: board diversity on the basis of ethnicity, board diversity on

the basis of gender , board diversity on the basis of gender non-whites (i.e., black women) , and board diversity on the basis of both ethnicity and gender ,used Tobin's Q (Q) is the main dependent variable/measure for market valuation. As a robustness check, however, he use ROA and total share return (TSR), as an alternative accounting and market-based organizational valuation measures, respectively.There is a case that the result statistically significant and positive relationship between board diversity and market valuation, implying that the SA stock market values ethnic and gender diversity within organizational boards. Ethnic diversity is valued more highly by the SA stock market than gender diversity. This sheds new crucial insights on the relative value relevance of gender versus ethnic diversity on market valuation. But do not find any evidence of a significant non-linear link between board diversity and market valuation.

Employee-orientation reflecting the 5 key areas of Training and Development, Career Opportunities ,Corporate Culture, Primary Benefits, and Secondary Benefits and Work-Life-Balance ([Wieland and Flavel, 2014]) investigates the relationship between gender diverse corporate boards and the level of employee-orientation using the Regression analysis and z-statistics from t- and Wilcoxon rank sum tests for Gender diversity .Three primary variables were stipulated by the presence of at least one- and at least three female members on the corporate board, and the percentage of board seats . The influence of gender diverse corporate boards at least one and least three female members. The secondary gender diversity dummy variables focused on board composition. For the Control variables consisted of board size, company age and size, tangibility, performance, return on assets, book leverage. They suggest that the relationship between gender diversity on corporate boards and the level of employee-orientation possibly depends on the type of board under consideration. Whilst gender diversity on the supervisory board has clearly been shown to have the potential to enhance the level of employee orientation, particularly investments in corporate culture, and secondary benefits and work-life-balance, the effect of gender diversity on the executive board level is not entirely clear, with often-conflicting results.

Abdullah ([Abdullah, 2014]), his paper aims at examining the factors that determine the appointment of women to the boards of Malaysian large firms. Gender diversity is first measured by the presence of women on the board. Secondly, gender diversity is also measured as a proportion of women directors to board size, which is measured by the number of women directors on a board divided by the board size. Board size is measured by the number of directors on the board. Finally, family directors on the board are measured by the presence of at least one family member of the controlling shareholder on the board .One of the result show that firm performance is negatively associated with gender diversity. That is, firms with low financial performance are more likely to have women on their boards. Hence, taken altogether, the evidence suggests that the appointment of women to the board is very much driven by tokenism and family connection rather than by the business case.

Abdullah, Lim, and Kong ([Abdullah et al., 2014]) their research aims to investigate the relationship between board diversity and institutional investors' shareholdings. The main part of this paper is based upon the analysis of the relationship between board diversity and institutional investors' shareholdings in Malaysia. While the independent variables are:

1. Diversity in derivatives like board independence and CEO Duality.
2. Diversity exposure like Multiple Directorships and interlocking Board.
3. Gender Diversity.
4. Diversity in Knowledge.

For dependent variable is Institutional Investors' Shareholdings .Percentage of woman on board has been insignificant on the institutional investors' shareholdings before the financial crisis, but it has then significantly related after the financial crisis. This may suggest that companies have included more women on board to strengthen the corporate governance in order to instill and regain the confidence of the investors.

The last few decades have witnessed a huge decline in the gender gap in employment as women, in particular married women, have entered the labor force. And there have been several important policy changes that try to help families reconcile family responsibilities with market work. (Guner, Kaya, and Marcos2014) focusing trends in gender equality in employment and wages in Spain. Dependent Variable: wage and Independent variable: female, education, immigrant, part Time, occupation. Using coefficient. The Ordinary Least Squares (OLS) and Mincer regressions.

Kristanti ([Kristanti, 2015]) , her article examine effect of Gender diversity, capital structure and price to book value to indirect cost of financial distress as it applies to family business in Indonesia. Family Business are those business with shareholder (single or family) owning more than 30%. Using ordinary least square regression methodology. Regressed indirect costs of financial distress with gender diversity and leverage with variable control is size of company. The changing demographic profile of workforce in Europe, Asia and the Americas may result in more women on the board .This is indicates that in Indonesian family business

also behaves the same as a non-family business run by professionals that have the good performance.

Quality management can improve business performance. As an entrepreneurship and social capital, are demanded of public performance center CEOs to promote quality management. These characteristics determine the success of quality management, as the CEO's utmost support is critical to achieving the goals of quality management (Lawler et al. 1992) in Kim and Jung ([Kim and Jung, 2015]), CEO should acknowledge the importance of achieving the goal .their study performs an empirical analysis of the effects of quality management on business performance, in an attempt to ameliorate the business performance of public performance centers. The entrepreneurship, social responsibility (perception), and social capital have positive effects on quality management activities, and quality management activities have positive effects on business performances (market performance, financial performance.

Terjesen, Couto, and Francisco ([Terjesen et al., 2015]) focusing the role of female directors in enhancing the independence and effectiveness of boards. Dependent variable, they use two proxies for firm performance with Tobin's Q and ROA. For Independent variables, they use two independent variables: percentage of independent directors and percentage of female directors, both measured in terms of percentage of the board. At the board level, they control board size, number of board meetings, and CEO/chair duality. They also control for the firm's debt-to-assets ratio, a dividends dummy, percentage of free-float, percentage of institutional ownership, insider ownership, and book value of assets.Female directors send a positive signal to the public regarding a firm's ethical behavior. Firms with female directors have better financial performance. Furthermore, the positive firm performance effect of many independent directors is only positive if that board is also gender diversified.

3 Research Methods

This study used a meta-analysis approach that examines the results of the previous studies systematically, especially on the results of empirical research of Woman on Board. Relevant publications are collected using three sources, namely springer, Harvard and google scholar. Scientific search is done using two key words are "Woman on board". Scientific paper selected is the empirical ones published in international journals during 2008 to 2015.

4 Result and Discussion

4.1 Sample of Scientific Paper

In this studi, 20 papers are used. It is important for meta analysis contain the list of the samples that will be collected and analyzed. Samples are divided into three categories, i.e., individual (4 samples), companies (11 private and listed company), and country (one sample in Europe).

4.2 Predictor Variable

Woman on board research was dominated by research of gender diversity and ethnic diversity, found in 10 studies in the period 2008 - 2015; research was focus with percentage of female on board to the firm performance of the company. The predictor variables are shown in the table 1.

Table 1: Predictor Variable

No	Predictor variable	Number of papers
1	Gender diversity and ethnic diversity	10
2	Percentage of females on board	6
3	Board size	2
4	Gender, age , marital status, number of children, education, career	3
5	Ratio of earned income by females and males	1
6	Family directors on the board are measured by the presence of at least one family member of the controlling shareholder on the board	1
7	Percentage of independent directors	1
8	Board Independence , CEO Duality , Diversity in Knowledge	1
9	Roles on the board	1

4.3 Measurement of Company's Performance

Company's performance can be viewed from various aspects and calculations, some of researcher using the same basis as a measurement of corporate performance. namely with Return on Asset (ROA),([Ferreira, 2010]), ([Ntim, 2013]), ([Hassan et al., 2015]), ([Terjesen et al., 2015] , Return on Equity (ROE) ([Hassan et al., 2015]), ([Luckerath and Rovers., 2013]), Return on Sales (ROS) ([Luckerath and Rovers., 2013]), The percentage of annualized total share returns made up of share price and dividends (TSR) (Ntim 2015),

The ratio of total assets minus book value of equity plus market value of equity to total assets, (Ntim 2015), Return on Invested Capital (ROIC),([Luckerath and Rovers., 2013], Tobin's q (market value of assets over book value of assets) ([Ferreira, 2010]), ([Terjesen et al., 2015]), (Ntim 2015). The formula of financial performance can be seen below:

1. $ROA = \frac{Net\,income}{Total\,Asset}$
2. $ROE = \frac{Net\,Income\,(Operating\,profit)}{Equity} \times 100\%$
3. $ROS = \frac{Net\,income\,before\,interest\,and\,tax}{sales}$
4. $ROIC = \frac{Net\,operating\,profit\,after\,tax}{Invested\,capital}$
5. $Tobin's\,Q = \frac{Total\,market\,value\,of\,firm}{Total\,asset\,value}$

4.4 Statistical Method

The most used statistical method is Regression such as The Ordinary Least Squares (OLS), Mincer regressions, logit regression and others, followed by Correlation and non parametric, details of the list of statistical Analysis can be seen in table 2.

Table 2: List of Statistical Analysis

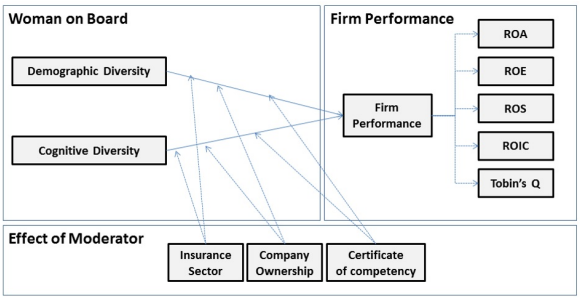
No	Method	Number of research	Example Reference
1	Regression	13	Terjesen, Couto, and Francisco (2015)
2	Correlation , Anova	6	Stoker , Der Velde, and Lammers (2012)
3	Non parametric	1	Virtanen (2012)

4.5 Proposed Research Model

The model used previously by Hassan, Marimuthu and, Johl ([Hassan et al., 2015]) they are using the predictor demographic diversity and cognitive diversity with control variable are firm size, firm age and the board size while dependent variable is the firm financial performance. For the future study are used to another control variable are insurance sector, ownership and professionalism as a model are seen in figure 1.

The focusing of future study is to identify the influence woman on board and impact to the financial firm performance .The outcome of future study will give the benefit for the business, shareholder, professional and the insurance community.

Figure 1: Model of Ownership and Professionalism



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Extended Fraud Triangle Model: Moderating Effect of Corporate Governance and Risk Management

Robby Loho
Doctoral Program in Economics
Gunadarma University
robby@marein-re.com

Abstract

This research used a broaden fraud triangle model by adding two new variables as a moderator which are good corporate governance and company risk management. The samples in this research are direction board of directors and public insurance company commissioners in Indonesia. The application of GCG is measured by GCG index by using worksheet that is published by regulator, whilst implementation of risk management is measured by using risk management index. The hypothesis in this research is examined by using structural equation model to fraud triangle model and Moderated Regression Analysis to influence the moderation from GCG and risk management. Characteristics of a company such as size, insurance sector, as well as board of direction composition and commissioners as another variable which is evaluated its influence partially towards the variable or the relationship between research variables.

Keywords : Fraud, Fraud Triangle Model, Theory of Planned Behavior, GCG, risk management

1 Introduction

Fraud problem becomes a center of attention when there is a global financial crisis which starts in 2007.[Stanton, 2011] states that company management fails to protect the ownership and as a stakeholder in company. That failure makes the company realize of the importance of good corporate governance to anticipate and predict similar events in the future. Insurance corporate governance has an important role to convince and gain trust from the stakeholders, especially consumers and investors, that insurance company has been managed based on transparency, fairness, accountability, responsibility, and independency.

[Richins, 2014]states that fraud is one of the main failure causes which decreases the company image, especially in the last ten years. There are some special ways which can be done by the company to decrease and omit that fraud. Hiring internal or external auditors, creating cultural etiquette, implementation of computer programs, using whistleblower, management surveillance in micro level, fixing package for employee's compensation, as well as giving out sanctions or punishments towards any kinds of fraud. According to Lin et al, fraud in a company creates a financial hindrance in the means of a company that experience fraud shows sensitivity towards a positive cash flow after the fraud occurs. The result of this research shows that fraud may have a concrete impact towards the company performance through the impact on external financial expenses and internal cash authority. Fraud in financial report is still a huge problem although there is a legislative effort and study from [Odom and Ugrin, 2014] which helps in identifying how to rationalize a fraud, when the consequences can be anticipated, as well as why the prevention is ineffective.

[Haithem et al., 2014]states that the cause of fraud is not universal and its impact towards the involvement of fraud is probably influenced by cultural factor in a wide range of levels, society level which leads to individualism dimension or collectivism, as well as idiocentrism/allocentrism which is cultural conceptualism level as individual. Thus, the understanding towards a wide range of cultures in the fraud will enrich knowledge about how and why the fraud may occur, how the fraud can be detected, and how the fraud can be controlled. According to [Cumming et al., 2011], current research about the fraud indicating factors in the companies in developing countries, mainly is focused on the mechanism of internal governance and a small part of them is about the impact of the presence of external party, such as involving an analyst. [Biljanoska, 2015] mentioned that implementation of risk management system in general is the base of detecting and preventing fraud.

[KNKG, 2009]states that insurance company is a company which promises protection towards the consumers and or people who have the polis as

well as gathering people funding. Both of these roles experience a rapid growth which therefore requires insurance company that is strong and reliable. Insurance industry which consists of insurance company, reassurance company, and supporting insurance company which operate in sharia system, must uphold insurance principles especially utmost good faith principle and good corporate governance implementation to fulfill the responsibility as promised. GCG must be understood as well by the stakeholders hence the insurance industry can develop better.

The implementation of risk management effectively has an aim to ensure that the risk can be understood, managed, and if necessary, can be communicated to the stakeholders. The implementation of risk management is getting more popular in many kinds of economy sector, especially in financial institution which is a trigger as well as the most severe part that receives major impact of global financial crisis. [OECD, 2014] states that a huge surprise from the global financial crisis is the failure in implementing risk management in a company. One of the consequences which have a massive impact is financial fraud which occurs in the companies, even in the top level management. This matter is strongly related with business etiquette problem and also breaks the trust of stakeholders. This fraud is even affecting the bankruptcy of companies and lawsuits in several corporate which operate in international level.

Two main factors which are considered to decrease the fraud risk in insurance industry are the implementation of good corporate governance and risk management of insurance companies. However, in this condition, the implementation of GCG and risk management in Indonesian insurance industry is relatively new if it is seen from the OJK new regulations which have been published only in the last two years, which are in 2014 and 2015. This condition shows that GCG implementation and risk management relatively are not yet implemented entirely and in general in insurance industry. Hence, it is predicted to have an impact on identification attempt and fraud risk management.

Identification of fraud risk and its management can be seen from the perspectives of board of directors and commissioners from public insurance company in Indonesia. Implementation of GCG in insurance industry in Indonesia relies on the regulation of GCG which is released by Otoritas Jasa Keuangan (OJK). Implementation of risk management in insurance companies also relies on the regulation of OJK as well as the issued letter about the risk of insurance company evaluation. The risk evaluation process is measured by perception from board of directors and commissioners, including the evaluation towards the fraud risk which is experienced or encountered in the company.

The aim of this research is to obtain information or a valid data which is reliable and based on the facts also empirical data that can be explained as: (1) To know and analyze if the principles of corporate governance is good, which consists of accountability, transparency, responsibility, independency, and fairness, influencing towards the fraud in insurance industry, and (2) to know and analyze if the implementation risk management process, which consists of risk identification, risk analysis, evaluation, and risk management influence a decrease in number of frauds in insurance industry.

2 Literature Review

Fraud Triangle Model

According to The Institute of Internal [of Internal Auditor, 2009], the understanding of fraud is :

> Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetrated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage

In the insurance context, National Association of Insurance Commissioners (NAIC) states that insurance fraud happens when the insurance company, agent, and loss evaluation, as well as consumers do fraud intentionally to gain an advantage which is illegal.

Fraud Triangle Model is first stated by Donald R. Cresses in 1973 and becomes one of the research models that is used as a reference and continues to develop until present time. [Mackevicius and Giriunas, 2013] explain that the model transformation seems like this figure below.

According to [of Internal Auditor, 2009], fraud risk evaluation generally consists of three main steps which are: (1) Fraud risk factors identification which are relevant, (2) Potential fraud scheme identification and creating its priority based on its risk level, (3) Surveillance mapping that exists in order to find the potential fraud scheme and to identify the inequality, (4) examining the effectiveness of operational fraud prevention and detection surveillance, and (5) documentation and report of fraud risk evaluation. Prevention process and fraud risk detection can be seen in the figure below:

Research done by [Aghghaleh et al., 2014] used the fraud triangle model from financial and management perspective which analyzes the relationship between companies experience in fraud with factors such as sales to credit ratio, debts to

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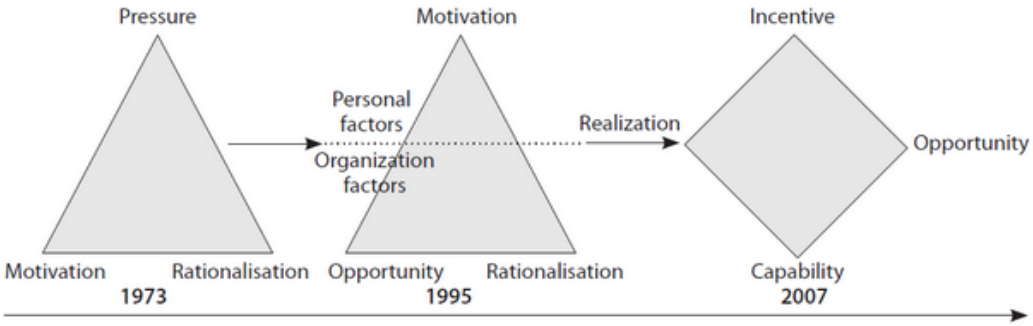

Figure 1: Fraud Triangle Model Evolution [Mackevicius and Giriunas, 2013]

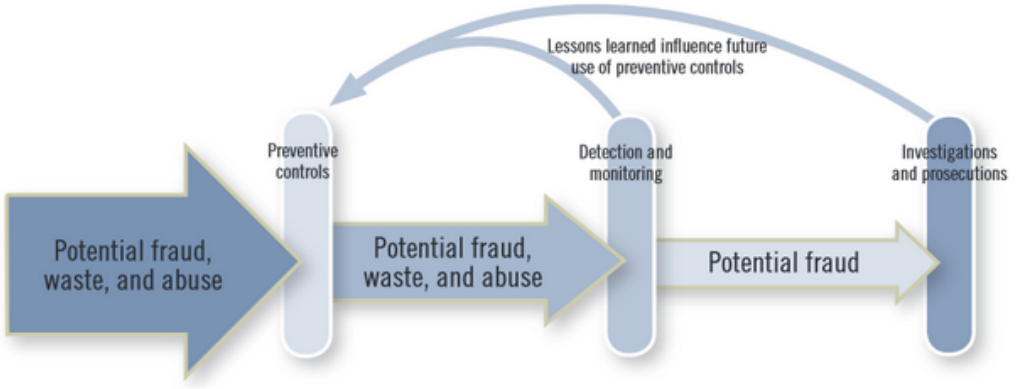

Figure 2: Prevention, detection, and fraud investigation [of Internal Auditor, 2009]

assets ratio, the total number of auditing committee, and total number of board of directors. Some researchers that use that model is [Boulter et al., 2013] who use the statistic approach, which is the regression analysis, to know the financial factors and management structural which affect the experience of the companies fraud occurrence in Malaysia.

Good Corporate Governance

According to [Kostyuk et al., 2007], the term of "Corporate Governance" can be interpreted as narrow and broad which are connected with two perspectives, which are shareholders and stakeholders. In the narrow perspective, governance is a relationship between company managers, board of directors, and shareholders. While in broad perspectives, governance includes combination of laws, regulations, share issuance regulation, and practices in managing private companies in which the company attracts capital, operates efficiently, and generates profits, as well as fulfilling responsibility and people's expectation.

[Claessens, 2003] states that the understanding governance can be classified into two groups. First group emphasizes on the behavior patterns which are actual behavior of companies in different measurements, such as performance, efficiency, growth, financial structure, and treatment to the shareholders and stakeholders. The second group emphasizes on the normative working framework which are regulations whereas a company that operates are from law system, judicial system, financial markets, and labor market.

Referring to World Bank, the governance of a company consists of four pillars which are accountability, fairness, transparency, and responsibility. Accountability assures that management ranks are responsible to the board of directors, and board of directors is responsible to the shareholders. Fairness pillar protects the rights of shareholders, treating every shareholder in fairness and justice, including the minority of shareholders. Transparency pillar assures the rate and accuracy of revealing important information, including financial situation, performance, ownership, and governance. The last pillar is responsibility which understands the rights of shareholders and encourages cooperation between companies and stakeholders in order to create welfare, employment, and economy sustainability.

The governance principles according to OECD briefly includes: (1) Ensure that basic working framework of governance is effective' (2) Rights of shareholders and functions of controlling shareholders; (3) Fair treatment towards the shareholders; (4) The role of shareholders in corporate governance; (5) Revealing and transparency; (6) Directors responsibility. In OECD 2004, it is stated that:

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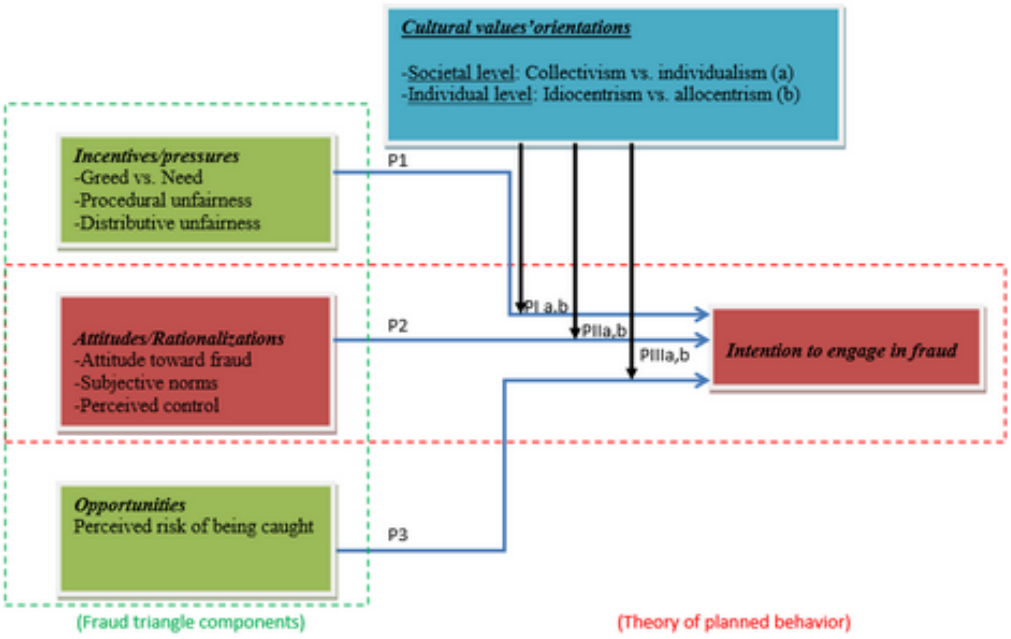

Figure 3: Conceptual framework by [Haithem et al., 2014]

"working framework of company governance must encourage transparency and efficient market, along with the laws and regulations, and divides clearly the responsibility and obligation between the authorities which conduct surveillance function, regulations, and law enforcement."

OJK regulation explicitly regulates risk management or risk management implementation which is in Peraturan Otoritas Jasa Keuangan Nomor 2/POJK.05/2014 about good corporate governance for insurance companies. A good corporate governance is a structure and process that is used and implemented in insurance industry to increase target of profit and to optimize the value of a company for all the stakeholders especially the polis holders, participants and or other parties that gain benefit, in terms of accountable and in regards to the values in law as well as etiquette values.

Risk Management

The understanding of risk management in terms of editorial differs from one institution to another, even though in terms of substantive, it is relatively similar. Some understandings of risk management from international institution are as follows:

1. General management functions which identify, evaluate, and manage the cause and effect from uncertainty and risk from organization. (LOMA)

2. Identification, analysis, and risk management which may threaten operation, asset, and other responsibilities from an organization. (CII)

3. Risk management of a company is a process, which is influenced by board of directors, management, and other personals, implemented in strategy implementation as well as to include entire company, designed to identify potential events that may affect business entity, as well as to manage risks as in the estimated risk which is expected by the company to provide proper assurance with the reach of company goal. (COSO)

4. Systematic process through understanding, evaluation, and risk management to maximize the opportunity to reach the goal and assure the organization, individual, and people. (IRM)

5. The coordinated events to direct and control organization as in line with the risk. (ISO 31000)

6. Process whereas an organization in every industry evaluates, controls, exploits, uses, funds, or surveys the risk from all the resources with the aim of increasing short-term value and long-term value from organization from stakeholders. (CAS)

The understanding of risk management for an insurance company in Indonesia refers to OJK (2014) which is:

> The series of procedures and methodology which are used to identify, measure, survey, control the risk may appear from the event in non-bank financial services institutions.

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In the year of 2010, three associations - AIRMIC, ALARM, and IRM – together do a completion of company risk management steps which has been arranged in 2002 and is adjusted as standard of ISO 31000. The steps of risk management that have been adjusted with the standard of ISO can be seen as follows:

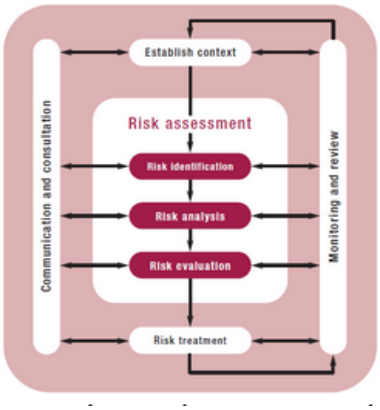

Figure 4: A Structured approach to Enterprise Risk Management [AIRMIC, 2010]

[Ciorciari and P, 2008]states that the conduction of company risk management framework (ERM/Enterprise Risk Management) encourages and increases the awareness of risk in every management level in a company, from strategic to operational level, and from top management to the employees. Referring to [COSO, 2004]. ERM is a process of risk management of a company, which is influenced by board of directors, management, and other personals, implemented in strategy implementation as well as to include entire company, designed to identify potential events that may affect business entity, as well as to manage risks as in the estimated risk which is expected by the company to provide proper assurance with the reach of company goal.

Proposed Research Model

The method that is used in this research is survey method and data collection which aims to know and determine the temporary position of the variables – the evaluated variables are based on the data during the research and connecting between variables that are evaluated. The data sources are from all the board of directors and commissioners in public insurance companies in Indonesia which is by filling in a questionnaire and GCG index and risk management index by top leaders in public insurance company.

The implementation of good corporate governance uses the GCG index that is issued by regulators in Indonesia. The risk management is measured by index that is developed by Monde and Girogino by using several questions that are classified into three fields which are: (1) Risk Cultural, (2) organization, and (3) process. Risk management index measurement uses 22 closed questions which therefore the score will be 0 as the lowest and 100 as the highest. This research model will rely on the fraud triangle model which is developed by [Harrison, 2014]. Fraud triangle model is added with GCG variable. Risk management in insurance companies and public insurance company's characteristics as moderator. The suggested research method can be seen below:

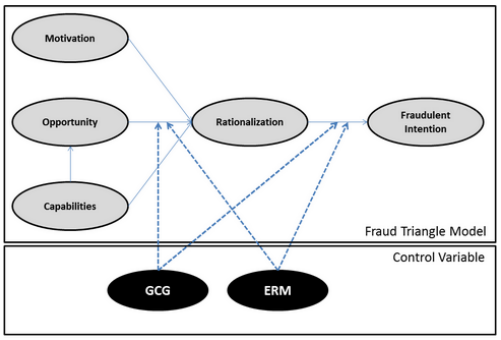

Figure 5: Proposed Research Model

Statistic technique that is used in the model examination or research hypothesis is Structural Equation Model and Moderated Regression Analysis.

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Effect of Social Security and Socio-Demographic Factors on Economic Growth in ASEAN Countries: Research Model for Panel Data Analysis

SaptoTrilaksono
Doctoral Degree in Economics,
Gunadarma University
trisapto7355@yahoo.com

Abstract

The Pension system as basic component of the social security system is of the Pay As You Go Type, being vulnerable to demographic changes. Sustainability of social security system is given primary by the mass of contributions. So, the greater old age dependency ratio (the ratio of people aged 65+ and those aged between 15 and 65), then the more the deficits of social security funds. This paper described a number of factors that affect the deficit of social security funds based on theoretical framework and previous empirical research. Proposed research model is described at the end of the paper showing the relationship between social security and socio-demographic factors and economic growth. Socio-demographic factors consist of a population aging, poverty line, and unemployment rate. Research model will be tested with regression techniques for panel data analysis using data of countries in the ASEAN region for the last five years.

Keywords :Economic Growth, Population Aging, Pay As You Go, Social Security

1 Introduction

ASEAN Social Security Association [Association, 2015] stated that the need for social security planning has become more crucial than before according to increasing of life expectancy and population growth. Belea and Pânzaru [Belea and Panzaru, 2012] stated that social security is a broad concept that incorporates both social insurance and social assistance. Social security systems are highly vulnerable to socio-demographic and economic changes. According to Zhao [Zhao, 2010], social security transfers resources from the young to the elderly (age 65+) whose marginal propensity to spend on health care is much higher than the young so that will increase the aggregate health spending.

If we see the social security system as providing a safety net for families cast into deep poverty by economic transition, then there must be a strong case for reform of the social assistance programme, despite the poor state of the public finances [Ackrill et al., 2002]: According to Marini and Scaramozzino [Marini and Scaramozzin, 1999], social-security reforms are arguably the most debated fiscal-policy issue in the major developed countries due to the occurrence of permanent demographic and productivity shocks. Hessels, Gelderen, and Thurik [Hessels et al., 2008] stated the policy makers challenges is then to design social security systems in such a way that they do provide sufficient income security combined with incentives for innovative and growth-oriented behavior in order to better exploit entrepreneurship as a potential source for innovation, employment creation and growth.

International Labour Organization [Organization, 2015] stated the Indonesian social protection system combine social insurance programs with various social assistance schemes. According to Act Number 40 in 2004 about the National Social Security System, government of Indonesia has defined five insurance programs to be developed under the national social security system. The programs are healthcare, work-injury, death benefit, provident fund and pension. The social Health insurance program in Indonesia administered by BPJS Kesehatan which implemented since January 2014 and designed to be a universal healthcare program. The program combined contributory and non-contributory components. According to the national medium term plan 2015-2019, the program will cover a half of the population in October 2014 and is expected to cover at least 95% of the population by 2019.

There is a new benefit arise in Act Number 40,

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namely pension benefit. This social security of pension system administered by BPJS Ketenagakerjaan. If the target of social security of healthcare will cover all population (including poor people where their premium paid by the government), but for social security of pension system, the target are all employee working to the employer and paying the contributions base on a certain percentage of their wages. The focus in this paper is social security of pension systems, because this program has to stand on their own contributions among all participants of the program, which they may be giving problems in the long run because of its sustainability along with the increase of old age dependency ratio.

According to Asian Development Bank [Bank, 2012], the Social Protection Index (SPI) for Southeast Asia is below average, at 0.095, even though the region includes one high-income country, Singapore, and several large middle-income countries, such as Indonesia, Malaysia, the Philippines, and Thailand. The SPIs for these five countries range from 0.169 for Singapore to 0.044 for Indonesia. Even though this region's average GDP per capita is above average, its spending on social protection as a share of GDP is only 2.6%. ADB [Bank, 2012] three countries (Cambodia, Indonesia, and Lao People's Democratic Republic) spend only around 1% of their GDP on social protection.

They are many questions arise in implementing social security, especially on social security of pension system in Indonesia: (1) If the government evaluating the programs and there are actuarial deficits on every single of pensioners, will the government cover the deficit and increase the contribution? and still adjust the benefit payable to pensioners according to its indexation? (2) There are also other regulations regarding post employment benefit. Does the government will integrate them? (3) It may happened normal pension age of the employer differ from normal pension age of social security of pension. If normal pension of employer is smaller, do the employees who already pension in the company have to wait pension payment from the social security? How about the contributions? Are they any additional benefit while waiting the payment due? (4) For making the social security of pension system become stable and sustain, when will the government increase the contributions? How big is the increase? and (5) If the pension benefit will increase according to a certain indexation, it means the actuarial gap become wider. Will the increase will be yearly?

2 Social Security of Pension in Indonesia

Indonesia, as one of developing country, beginning to develop public pension through The Act No 40, 2004 on National Social Security System and its government regulation No 045, 2015 on social security in pension system.

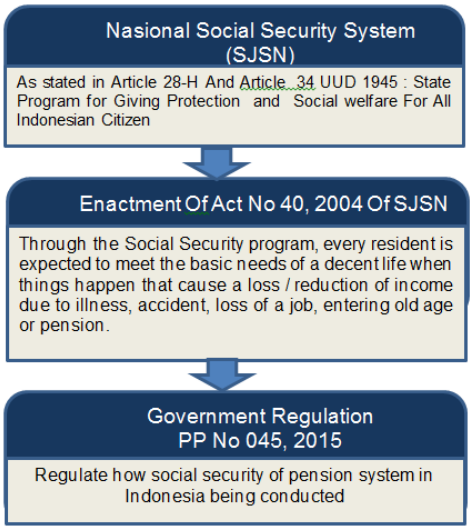

Figure 1: Regulation framework of Social Security in Indonesia

1. *The system using both defined benefit and defined contribution formula for paying the pension benefit for participants whose age already reach 56 and have already at least 180 months as member of the program.*

   Under defined contribution (DC) plan, each employee has an account into which the employer and, if its contributory the employee make regular contributions. Benefit levels depend on the total contributions and total investment earnings of the accumulation in the account. Defined contribution plans are, by definition fully funded. Here is expected accumulation of contribution, assume 8% investment earning. Detail calculation can be seen in the following table.

   On the contrary, in defined benefit (DB) plan, the employee's pension benefit entitlement is determined by a formula which takes into account years of service for the employer and, in most cases, wages or salaries. For example if an employee whose age now 56, 57 or older, and begin receiving monthly pension as high as IDR300.000,- without any adjustment for escalation for life, than the adequate total fund

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Table 1: Accumulation of Contribution as % of wages

Months	Accumulation Of Contributions					
	25	30	35	40	45	50
180	12,688,191	12,696,951	12,666,635	12,601,811	12,485,352	12,306,431
192	14,360,424	14,368,002	14,328,962	14,246,719	14,102,048	13,883,910
204	16,189,878	16,195,510	16,145,655	16,042,257	15,864,585	15,600,303
216	18,189,549	18,192,269	18,129,066	18,000,243	17,784,184	17,465,664
228	20,373,428	20,372,018	20,292,424	20,133,371	19,872,771	19,490,639
240	22,756,574	22,749,507	22,649,897	22,455,259	22,142,990	21,686,492
252	25,355,182	25,340,561	25,216,663	24,980,508	24,608,264	24,065,135
264	28,186,661	28,162,135	28,009,000	27,724,733	27,282,838	26,639,107
276	31,269,705	31,232,390	31,044,373	30,704,603	30,181,832	28,692,673
288	34,624,385	34,570,774	34,341,531	33,937,849	33,321,283	30,744,199
300	38,272,245	38,198,116	37,920,589	37,443,301	36,718,198	32,942,409
312	42,236,392	42,136,735	41,803,107	41,240,975	40,390,598	35,297,791
324	46,541,589	46,410,559	46,012,153	45,352,144	44,357,511	37,821,583
336	51,214,356	51,045,261	50,572,362	49,799,421	47,717,312	40,525,827
348	56,283,097	56,068,390	55,509,966	54,606,826	51,129,100	43,423,423
360	61,778,234	61,509,500	60,852,856	59,799,873	54,784,831	46,528,198

Note: monthly wages IDR 1000000, yearly wages increase 5%, and monthly contribution of wages 3%

needed to fulfill these payments can be seen in table below. Employee now age 56, and begin receiving monthly pension IDR1.000.000,- (without escalation), then the predicted adequate fund needed now to give this pension is IDR 125.230.128,-

2. b. The contribution currently 3% of wages and will increase up to 8% depending of national economy and actuarial adequacy

   It has been calculated that employee whose now age 40 and having monthly salary IDR1.000.000 and 3% contribution of wages to the program, then its accumulation funds after 192 months is IDR14.246.719,-. Using adequate principle between benefits and contributions, then at age 56 the employee will receive monthly pensions equal to IDR14.246.719 divided by IDR125,230198 or IDR113.764,25.

3. *The monthly minimum pension benefit is as low as IDR 300.000 and maximum as high as IDR3.600.000. This minimum and maximum will be adjusted according to a certain indexation rule*

   Say that an employee now age 40 and having monthly salary IDR2.000.000,-. It means 16 years from now, he will received monthly pension IDR227.528.49 (assume the government does not change yet the minimum pension during the next 16 years). For monthly pension IDR300.000.000, the adequate lump sum fund needed is IDR37.569.059,-. Since the total accumulation of contributions only IDR14.246.719 then there is an actuarial deficit equal to IDR37.569.059 minus IDR14.246.719 = IDR23.322.340,-.

   What will happen if the government adjusts this minimum and maximum pension according to the index? The Deficit will be wider and wider. Individually there is the deficits, but since social security in pension system not an annual balancing requirement and based on law of large number, then as long as Long term of view stability and sustainability can be maintain, then the program still can be go through.

4. *The maximum wages for contribution is IDR7.000.000,- for year 2015, and will be adjusted every year according to the increase of gross domestic bruto.*

   If the gross domestic bruto increase by 5% by 2016, 5% by 2017, and increase with the same manner in future years, means the maximum wages using for contributions also increase. The detail calculation can be seen in the following table.

Table 2: Estimating wages and contribution

Year	Maximum Wages Using For Contribution	Actual Salary	Wages For Calculating Contribution
2015	7,000,000	6,000,000	6,000,000
2016	7,350,000	6,600,000	6,600,000
2017	7,717,500	8,000,000	7,717,500
2018	8,103,375	8,200,000	8,103,375
2019	8,508,544	8,400,000	8,400,000
2020	8,933,971	9,000,000	8,933,971
2021	9,380,669	9,300,000	9,300,000
2022	9,849,703	10,230,000	9,849,703
2023	10,342,188	10,230,000	10,230,000
2024	10,859,298	11,000,000	10,859,298
2025	11,402,262	11,300,000	11,300,000

5. *Pension age will be 57 by year 2019 and will gradually increase became 65 by year 2043.*

   The government will increase the pension age gradually, but the employer may not do the same thing. Currently, normal pension age most of company is 55 or 56. If the employers do not follow the government to increase normal pension age for their employees, then there will be gap in pension payments for employees who have been already pension from the company because may be they do not entitle for social security in pension yet.

3 Literature Review

Brauninger [Brauninger, 2005] stated that the social security system has two components: old age pensions and unemployment insurance. His research result shows that pension program has a direct effect on economic growth. Pensions as well as unemployment benefits influence equilibrium unemployment caused by wage bargaining. Since unemployment deteriorates growth, both types of social security have an indirect negative effect on

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Table 3: Pension age for social security in pension

Year	Pension Age For Social Security in Pension
2015	56
2016	56
2017	56
2018	56
2019	57
2022	58
2025	59
2028	60
2031	61
2034	62
2037	63
2040	64
2043	65

Table 4: Year pension from the employer

Year	Pension Age For SSP	Year of Pension From The Employer — Employee Age At 2015 +	Years of Contribution
2015	56	36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	0
2016	56	37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	1
2017	56	38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	2
2018	56	39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	3
2019	57	40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56	4
2020	57	41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57	5
2021	57	42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57	6
2022	58	43 44 45 46 47 48 49 50 51 52 53 54 55 56 57	7
2023	58	44 45 46 47 48 49 50 51 52 53 54 55 56 57 58	8
2024	58	45 46 47 48 49 50 51 52 53 54 55 56 57 58	9
2025	59	46 47 48 49 50 51 52 53 54 55 56 57 58	10
2026	59	47 48 49 50 51 52 53 54 55 56 57 58 59	11
2027	59	48 49 50 51 52 53 54 55 56 57 58 59	12
2028	60	49 50 51 52 53 54 55 56 57 58 59	13
2029	60	50 51 52 53 54 55 56 57 58 59 60	14
2030	60	51 52 53 54 55 56 57 58 59 60	15
2031	61	52 53 54 55 56 57 58 59 60	16
2032	61	53 54 55 56 57 58 59 60 61	17
2033	61	54 55 56 57 58 59 60 61	18
2034	62	55 56 57 58 59 60 61	19
2035	62	56 57 58 59 60 61 62	20
2036	62	57 58 59 60 61 62	21
2037	63	58 59 60 61 62	22
2038	63	59 60 61 62 63	23
2039	63	60 61 62 63	24
2040	64	61 62 63	25
2041	64	62 63 64	26
2042	64	63 64	27
2043	65	64	28
2044	66	65	29

growth. In many cases social security crowds out education, and reduces economic growth and social welfare [Pecchenino and Utendorf, 1999] According to Zhang and Zhang [Zhang and Zhang, 2004], the estimated coefficient on social security is significantly negative in the fertility equation, insignificant in the saving equation, and significantly positive in the growth and education equations. By contrast, the estimated coefficient on growth is insignificant in the social security equation. The results suggest that social security may indeed be conducive to growth through tipping the trade-off between the number and quality of children toward the latter.

Cerda [Cerda, 2005] stated that financial crisis in social security programs might be endogenous because social security affects fertility and human capital's decisions and thus, the aggregate growth rate of the economy. According to Zweifel and Eugster [Zweifel and Eugster, 2008], globalization or transition to more open economies tends to exacerbate the negative feedbacks an expansion of social security may have on economic growth. Systems run into problems sooner mainly because some of those who can benefit from increased mobility seek to avoid the financial burdens imposed on them by social insurance.

Ono [Ono, 2003] considers a situation in which population aging causes a heavy burden of social security payments where public debt is issued by the government to finance the payment. According to Wigger [Wigger, 2001], there is not necessarily a conflict between productivity growth and intergenerational redistribution. Rather, it depends on the outcome of the public decision-making process whether social security is an obstacle or a stimulus to productivity growth. Drèze [Dreze, 2002] stated that the market position of low-skilled workers has deteriorated over the past quarter-century. The deterioration mostly takes the form of higher unemployment, at downward rigid wages. But, Ukai [Ukai, 2011]stated that they could not derive a clear relationship between the social security indexes and labor productivity. According to Dahl and Pedersen [Dahl and Pedersen, 2006], labor market activity and earnings are influenced by many factors, social policy and social security amongst others but also labor market conditions, labor market structures, business cycles, work environment, rules and regulations, culture and family patterns, to mention some crucial factors.

Wigger [Wigger, 2001] stated that social security in fact constitutes a conflict between the interests of living and future generations. Population aging is the factor with the greatest impact on social security systems, its effects being obvious: decrease in contributions due to the reduction in the number of contributors and increase in costs due to the increased number of beneficiaries (Belea and Pânzaru, [Belea and Panzaru, 2012]). According to Pecchenino and Utendorf [Pecchenino and Utendorf, 1999], population aging may engender intergenerational conflict since the most preferred tax policy of the initial generation, higher social security taxes and transfers, is generally not that of subsequent generations because social security crowds out education, a key to economic growth and improved social welfare.

Belea and Panzaru [Belea and Panzaru, 2012] stated that Social security states its specificity as a basic concept that includes all collective measures established by legislation to maintain individual or family income to ensure an income when some or all sources of income have been lost or exhausted, or in situations in which the individual must cope with increased cost. Designing good social security pension system must meet certain criteria, such as poverty alleviation, retirement income adequacy, benefit/contribution sustainability, income equality and wealth distribution

Ionescu [Ionescu, 2013] stated that the accentuation of the trend of demographic aging and

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the alarming deterioration of the economic dependency rate significantly affected the financial sustainability of the public pension system. In this context, reforming pension systems should consider two major objectives, namely, long term financial viability of the systems and ensuring adequate pensions towards maintaining a reasonable retirement income to prevent poverty and the social exclusion of older people European Commission [Anonymous, 2015] stated that Pensions – mostly from pay-as-you-go public schemes – are the main source of income of older employee in Europe. Retired people drawing a pension are significant and growing part of the EU population. European pension systems are facing the dual challenge of remaining financially sustainability and being able to provide Europeans with an adequate income in retirement, so that they can enjoy decent living standards in economic independence. Pensions affect public budgets and labor supply in major ways and these impacts must be considered in pension policy.

4 Proposed Research Model

The proposed research model is as follow:

$$y_{it} = \alpha_i + \sum \beta_{it}\chi_{it} + \varepsilon_{it}$$

The dependent variable (yij) is security protection index and economic growth. Economic growth that measured Gross Domestic Bruto (GDP) per capita. ADB (2012) introduced Social protection index (SPI) that is the ratio of total social protection expenditures to total intended beneficiaries. Total social protection expenditures are the sum of the expenditures on social insurance (SI), social assistance (SA), and labor market programs (LMPs). SPI of each country can be expressed in the following equation:

$$SPI = \frac{\frac{Total\ Social\ Protection\ Expenditure}{Total\ Intended\ Beneficiaries}}{0{,}25\frac{GDP}{Total\ Pupulation}}$$

The independent variables (xij) are social protection expenditure per capita and socio-demographic factors such as poverty line, unemployment rate, and dependency ratio. Variable of population aging or demographic aging referred to Belea and Pânzaru (2012) that is a term that indicates changes occurring in the distribution of population by age groups. A relevant indicator of the degree of population aging is the age dependency ratio (ADR) which refers to the number of individuals of retirement age compared to the number of economically active population, i.e. the ratio of those aged 65+ and those aged between 15 and 65. Poverty line and unemployment rate used secondary data from World Bank.

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Determinants of Willingness to be Health Insurance Customer in Indonesia: Proposed Research Model

Kasir Iskandar
Doctoral Program of Economic
Gunadarma University

Abstract

The aim of this paper was to examine individual preferences for willingness to purchase health insurance (private or social). The study was a meta-analysis of previous researches. Variables which influencing consumer willingness to purchase health insurance were discussed and identified based on previous researches. Subsequently research gaps were formulated and proposed for future research.

Keywords :health insurance, formal and informal sector, risk attitude, social communication, pricing, insurance knowledge

1 Introduction

World Health Organization (WHO) is encouraging all member countries to develop and ensure Universal Coverage. There are around 3 billions people lack of health cover. They are mostly informal worker in low to middle income countries (Drordan, 2014). Indonesia, as one of low to middle countries, is included to the problem arising. Biro Pusat Statistik (Bureau of Statistics Central, BPS) of Indonesia reported in 2012 there is 62,3% workforce working in informal worker, which is equal to 77.77 millions. Most of the worker in informal sector no protection except who belong poverty.

The lowest premium for social health in Indonesia is Rp 25.500,00 per month per person or equivalent US $ 1.74 and the highest is Rp 59.500,- In Iran the average Willingness to Pay (WTP) for social health insurance per person per month is 137 000 Rial (equal to 5.5 $US). Head of household with higher levels of education and income generally has more WTP for the health insurance. In addition, the WTP increase proportionally to the number of insured members of each household and inverse to the family size ([Nosratnejad et al., 2014]).

Indonesian government has decided to establish social health insurance funded by premium payment. For this purpose, government issued Law no 40 year 2004 about National System Social Security which is known as Jaminan Kesehatan Nasional (JKN- Health Insurance). To implement this law, a government organization named as Badan Penyelenggara Jaminan Kesehatan (BPJS) was established based on Law no 24 year 2011. Based on this law, all Indonesian citizens should be registered as JKN member. In December 2014 total member of JKN is 133,4 millions. Among them, 89,4 millions are poor people and government pay for their insurance premium. Taken into account total of Indonesia population is around 250 millions, then around 110 millions (almost 44%) do not have health protection yet. Government targeted by the year 2019, all Indonesian citizen should be registered on JKN. It raises question how to convince Indonesian citizen to be registered on JKN.

Thus the objective of the paper was to formulate willingness model on health insurance behavior.

2 Theoritical Framework

2.1 Consumer Behavior

Consumer behavior as a field of study is constantly growing. From a marketing perspective, consumer behaviour most probably became an important field of study with the development of the so-called marketing concept. Consumer behavior is an action that is directly involved in obtaining, consuming, and disposing of products and services, including the decision processes that precede and follow the action ([Bagozzi. and P., 2004]). Consumer behavior models have been developed extensively by many scholars. Prominent are Marshallian economic model (Schiffman & Kanuk, 1997), the Pavlovian learning model (Schiffman & Kanuk, 1997), the Freudian mathematical models (Schiffman & Kanuk, 1997), gravity model (Huff, 1964; Haynes & Fortheringham 1984; Mayo, Jarvis, & Xander 1988), dynamic model (Oliver, 1997; Jacoby & Chestnut, 1973), Theory of Reasoned Action ([Ajzen and Fishbein, 1980]), Theory of Planned

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Behavior ([Ajzen, 1991]), and other.

Theory of Reasoned Action (TRA) ([Fishbein and Ajzen, 1975]) has become the attention of researchers since decades ago. This theory has been tested on wide variety of cases, and support for TRA has been provided by studies involving various behavioral domains (such as Manstead, Proffitt & Smart, 1983; Pagel & Davidson, 1984; [Budd et al., 1984]; [Hoogstraten et al., 1985];[Young and Kent, 1985]; Budd, 1986; [Fishbein et al., 1986]; [Timko, 1987]; Cable, Knudson, Udd & Stewart, 1987; [McCaul et al., 1988]; Burnkrant & Page, 1988; Hennig & Knowles, 1990; Brubaker & Fowler, 1990; Netmeyer & Burton, 1990; [Stasson and Fishbein, 1990]; [Vallerand et al., 1992]; Mykytyn, 1993; Felton, Dimnik & Northey, 1995; Gibson & Frakes, 1997). However few scholars proved that TRA is not valid for all behaviors (such as [Thompson and Panayiotopoulos, 1999]; Johnston & Lewin, 1996).

Among behaviors which confirmed support the TRA are mothers' infant feeding intentions (Manstead, Proffitt & Smart, 1983); contraceptive behavior ([Pagel and Davidson, 1984]); seat belt use ([Budd et al., 1984]; [Stasson and Fishbein, 1990]); recreation behavior ([Young and Kent, 1985]);dental hygene behavior ([Hoogstraten et al., 1985]; [McCaul et al., 1988]); smoking behavior ([Budd et al., 1984]); voter participation ([Fishbein et al., 1986]); the effects of interpretive messages on behavior change (Cable, Knudson, Udd & Stewart, 1987); delay behavior in seeking medical care of breast cancer ([Timko, 1987]); moral behavior in sport ([Vallerand et al., 1992]), etc. In contrary side, Thompson & Panayiotopoulos ([Thompson and Panayiotopoulos, 1999]) and Johnston &Lewin (1996) showed that TRA is not suitable to use in evaluating decisions in an organisational context because of the dynamic and intricate multiphase, multi-person, multi-departmental and multi objective nature of the decision processes in organisation.

In an attempt to evaluate the rejection of TRA, regardless the TRA is simply applied to behavior, researchers have turned their attention to possible modifications that could make the theory an even better predictor of behavior. To mention few of them are Theory of Planned Behavior (TPB) by Ajzen (1991) and Technology of Acceptance Model (TAM) by Davis (1989). The TPB was derived from the TRA, which assumed that most human social behavior is under volitional control and, hence, can be predicted from intentions alone. According to the TPB as shown on Figure 1, perceived behavioral control, along with behavioral intention, can be used directly to predict behavioral achievement. Central factor in the TPB is the individual's intention to perform a given behavior.

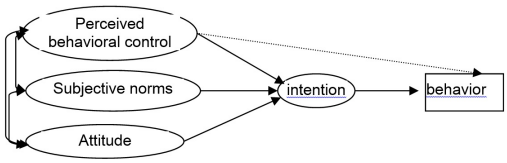

Figure 1: Theory of Planned Behavior[Ajzen, 1991]

The TPB was challanged by trying behavior particularly related to prediction and behavioral aspects by Bagozzi and Warshaw (1990). Bagozzi extensively performed research on consumer behavior both on decision making process and consumer actions ([Bagozzi. and P., 2004]; Bagozzi, Gürhan-Canli, and Priester, 2002; Bagozzi, Dholakia, and Basuroy, 2003; Bagozzi and Lee, 2002). Bagozzi ([Bagozzi. and P., 2004]) defined consumer's action as directly involved in obtaining, consuming, and disposing of products and services.

2.2 Insurance

There are four main models for financing health, namely:

1. National health insurance,
2. Bismack social health insurance,
3. Beveridge models, and
4. Out–of pocket model (Deloitte, 2012).

Indonesian government has decided to choose social health insurance for Universal Coverage.

Health insurance system has been applied for informal sector worker in low to middle income countries. However the result has not satisfied yet, the penetration is very low ([Dror and Lucy, 2014]). They found that in order to grow demand for health insurance in informal sector in LMIC, it is necessary to strengthen ground governance consistent with ground up based decision making under local condition.

Choosing health insurance policy is a complex decision due to a large set of al-ternatives. An increase in the number of alternatives increases decision-making time; makes subjects consider a lower fraction of the available information; makes it more likely that subjects will switch; and decreases the quality of their decisions. The introduction of positive costs of switching make people switch less often but improve the quali-ty of their decisions. Finally, if health deteriorates only gradually, individuals tend to stick to their current policy too long ([Schram and Sonnemans, 2008]).

Varghese (2014) proved that in Kerala India personal factor, social factor and marketing factor influence decision for purchasing health insurance. In

South Africa and Ghana, 62% and 55% of total respondents, respectively, were in favour of a progressive financing system in which richer groups would pay a higher proportion of income than poorer groups, rather than a system where individuals pay the same proportion of income irrespective of their wealth.

The effect of being insured under the voluntary component of Vietnamese Health Insurance, on patterns of treatment seeking behaviour. A multinomial logit model is estimated using household survey data from three provinces in Vietnam. Decisions regarding both the type of provider sought and type of care received analysis. Insurance status is treated as both exogenous and endogenous to account for potential selection bias. The results indicate that, overall, insured patients are more likely to use outpatient facilities, and public providers, an effect that is particularly strong at lower income levels (Jonett et al, 2004).

From a policy point of view, the WTP value can be used as a premium in a society. An important finding of this study is that although households' Willingness To Pay is not more than the total insurance premium, households are willing to pay more than the premium they ought to pay for health insurance coverage. That is, total insurance premium is 150 000 Rials and households ought to pay approximately half of this sum. This can afford policy makers the ideal opportunity to provide good insurance coverage for medical services according to the need of society ([Nosratnejad et al., 2014]).

Ama et al ([Ama et al., 2014]) show that health insurance and travel time to health facility are significant determinants of health care demand. Overall, compared to the uninsured, the insured are more likely to choose formal health facilities than informal care including self-medication when ill. Research of Ama et al ([Ama et al., 2014]) with title " Treatment seeking behavior social health insurance in Africa made conclusion that health insurance and travel time to health facility are significant determinants of health care demand. Overall, compared to the uninsured, the insured are more likely to choose formal health facilities than informal care including self-medication when ill. According to Ama et al ([Ama et al., 2014]), utilization as function of travel time, characteristics of illness, the insurance status of individual, demographic and socioeconomic can be express as $U = f(T, P, I, D)+e$. Daniel et al ([Daniele et al , 2002]) mention that income, education, private insurance and supply characteristics as factor of utilization health insurance. Jeong (2010) using meta analysis found that the relative non compliance of the self employed insurance due to partly to lack of transparency regarding their income. Imperfect information and insurance premium and fee affect enrollment. The demand for insurance elastic in the sense that small subsides generate substantial enrollment effect (Asuming, 2013). According to Aidoo et al (2010), using logistic regression found that factor influence willingness to adopt cop insurance are age, farmer size, land tenure, annual income, farmer experience and gender.

The root of the theory of the proposed research is the theory of planned behavior. Morris ([Morris et al , 2012]) drawing figure by adopting from Munro et al explain about behavior theory as figure 2:

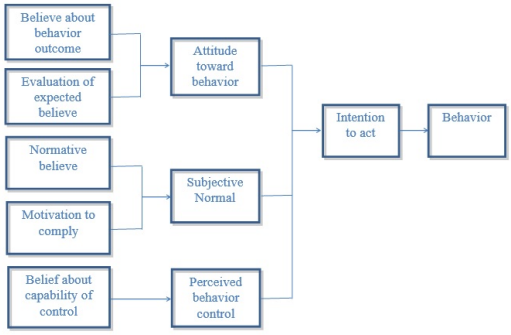

Figure 2: Behavior theory

Cohen (1991) proposed a model of consumer purchase decision, suggesting mar-keting inputs and psychological inputs results in consumer purchase decision.

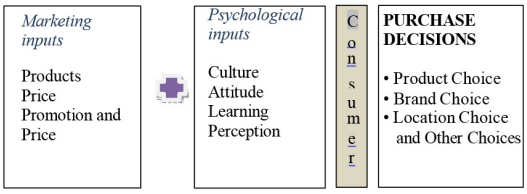

Figure 3: Consumer purchase decision

2.3 Proposed Research Model

Based on above mentioned research gaps, the proposed model is shown on Figure 4.

Hillton and Webster (2004) explain that the word risk is common and widely used part today vocabulary, relating personal circumstances, society and business. A risk can be defined as an uncertainty that could have positive or negative effect or one or more objective. While Attitude is state of mind, mental view or disposition with regard to a fact or state. Cook (2001) explain that understood through knowledge and understanding of a definition social reciprocity. Definition social reciprocity is social interaction and is displayed through the use of joint attention to share experiences and emotions with another person for a variety of events and in a variety of contexts.

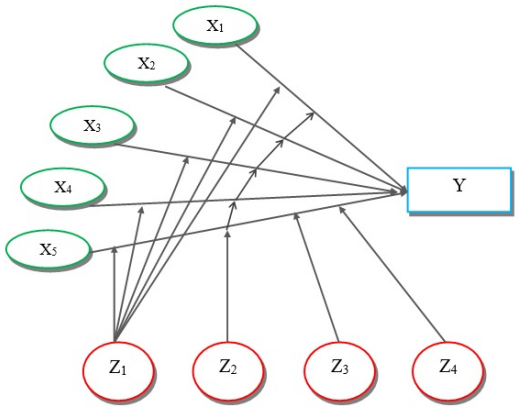

Figure 4: Proposed model

$X_1 = Risk\ Attitude$
$X_2 = Social\ Communication$
$X_3 = Pricing\ of\ Health\ Insurance$
$X_4 = Knowledge\ of\ Health\ Insurance$
$X_5 = Experience\ of\ Illness$
$Zn = Demography\ Factor\ as\ a\ predictors$
$Y_1 = Having\ policy\ health\ insurance\ or\ not$

Pricing or premium is the amount of policyholder or their sponsor pays to the health plan to purchase coverage. Boundless.com define illness or disease is a state of poor health, condition of the body or mind that cause pain, dysfunction, or distress can be deemed an illness. Sometime the term is used broadly to include injuries, disability, syndrome, infections, symptom, deviant behavior. Understanding about covering benefit, type of reimbursement, deductible, coinsurance, limitation, exclusion and procedure for getting benefit health insurance as definition of knowledge of health insurance ([Marquis, 1981]).

3 Methods

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Human Capital as One of the Major Factors of Labor Potential of the Enterprise

Kalandar Kh. Abdurakhmanov
Academician, Doctor of Economics,
professor,
Rector of Tashkent Branch of Russian
Economic
University after G. V.Plekhanov,
Republic of Uzbekistan

Abstract

At present society represents a complex system, one of which major components is human capital characterized by the system of indicators reflecting processes of reproduction of population, their possibilities (abilities) in satisfaction of needs in these conditions of life activity, taking into account state of health, safety and state of environment. Considerable funds are annually expended for reproduction of human capital that, in turn, leads to increase in productivity of social labor and growth of living standard of the population.

Keywords : capital in economy, financial capital, intellectual capital, labor potential of enterprise, sustainable development of economy, theory of human capital, investment into human capital, increase in standard of well-being of the population.

The capital (from Latin “capitalis” - “main”, “dominating”, “basic”) is a set of the property used for gaining profit. As an economic category on the one handit is a potential (accumulated wealth) which gives a chance to collect revenue regularly, on the other handit is a system of economic relations between interested parties.

Capital in economy is resources which can be used in production of goods or rendering services. In classical economy one of three factors is production; other two ones are land and labor.

There are four evolutionary forms of the capital which can be seen in Figure 1.

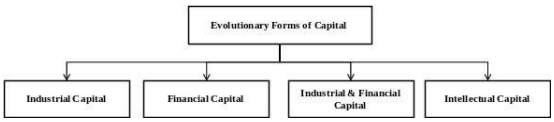

Figure 1: Evolutionary forms of the capital

Industrial capital is capital put in business; t is a working source of income in the form of means of production: cars, equipment, buildings, constructions, land, inventory of raw materials, semi-finished products and finished products, used for production of goods and services. Industrial capital arises in at the time of market economy formation. It is closely connected with national market.

Financial capital is a set of conditions when monetary form of the capital allows gaining profit without formal exchange of money for the goods. Growth of heavy industry with highly concentrated large-scale production, banking, and trade is inherent to it. Modern variant of financial capital is a venture capital which is directed to new projects, which have high risk of bankruptcy, but also potential profit is considerably above the average level.

Financial and industrial capital is characteristic for modern epoch of postindustrial society which is based on generality of electronic and information technologies in all spheres.

Term “intellectual capital” appeared in the beginning of 1990-s and designated the sum of all knowledge of the enterprise personnel which represents competitive advantage in the market. Thus initially under knowledge there understood patents, administrative skills, technologies, information on clients and suppliers and experience as well. Later this definition was specified as follows: “It is a knowledge the employees possess; it is an electronic network allowing the company to react to the change of market situation faster than competitors; it is a partnership of company and client, strengthening links between them and involving the consumer again”. [201, 2011]

Introduction of the term “intellectual capital” is

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an original reflection of increased role of knowledge of a person in creating cost of capital of modern enterprise. Knowledge is capital not for those to whom it belongs, b for those who use it for gaining profit, i.e. capitalizes.

The proprietor of intellectual capital is not the one who personally uses investments (expenses for education), but the one who appropriates a surplus value created by the subject of knowledge. Consequently, knowledge acts as a capital in hands of the businessman, instead of the worker. For the worker knowledge is an integral element of labor force. [Logachyov, 2006]

Human capital is theabilities and qualities accumulated by a person and generated as a result of investments which lead to the growth of labor productivity and incomes at expedient use.

Human capital is subdivided in three, i.e :

- General human capital - knowledge, abilities, skills which can be realized on various workplaces, in various organizations.
- Specific human capital - knowledge, abilities, skills which can be used only on a certain workplace, only in concrete firm.
- Human intellectual capital - capital embodied in people in the form of their education, qualification, professional knowledge, experience.

Cost of national human capital of the world countries was estimated by experts of the World Bank. For these calculations there used estimations, making human capital on expenses of the state, families, entrepreneurs and different funds. They allowed defining current annual expenses of the society for reproduction of the human capital.

Cost of the world human capital made 365 billion. US dollars or 66.0% of world riches. Among the world countries the highest cost of human capital is in the USA: it made 95 billion. US dollar or 77.0 % of national wealth, 26.0 % of the world result of cost of the human capital.

The Republic of Uzbekistan having entered upon the path ofbuilding modern state with developed market economyplanned radical restructuring of education system as one of strategic targets. At the same time it has been realized that only people having modern knowledge, intellectual potential and advanced technologies, can achieve set strategic development goals. The policy on reforming education became a key link of conducted reforms and society renovation, precondition of sustainable development of economy, integration of the country into the world community.

As President of the Republic of Uzbekistan Islam Karimov noted, “Today there is no necessity to prove that XXI century is admittedly becoming a century of globalization and boundary-spanning, information and communication technologies and

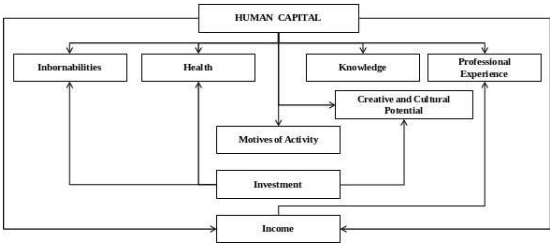

Figure 2: Structure of human capital [Kibanov A. Ya, 2013]

the Internet, a century of growing competition in the world space and world market. In these conditions the state which among the basic priorities always has growth of investments in human capital, training of educated and intellectually developed generation which in modern world is the major value and decisive force in achieving the goals of democratic development, modernization and renovation can make itself known”. [Pre, 2012]

In the report “Global index of innovations” for 2012 of International Business School “INSEAD” (France) which is among 5 best Business Schools of the world jointly prepared with World Intellectual Property Organization (WIPO) there carried out complex analysis of innovative development of 141 countries of the world. One of the basic components of the analysis is the level of human capital development in which the Republic of Uzbekistan occupied 35th place in this list. And Uzbekistan took general second place among 141 states of the worldaccording to the level of education system development.

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Development of Educational Complex as A Factor of Perfection of Labour Marketing The Conditions of Knowledge Economy

Nodir B. Tula
PhD associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Adiba G.Nuruddinova
PhD associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

The paper was intended to discuss demographic situation in the Republic of Uzbekistan. It was analyzed dynamics of gross national product, population employment, economically active population and number of labor resources. It was also shown basic directions of reforms in Uzbekistan, which doesn't inferior to "demographic window of possibilities".

Keywords : National program of professional training, labour market, competitiveness of economy, employment, professional training.

1 Introduction

Strategy of employment maintenance in Uzbekistan provides the decision of this problem on the basis: employment level improvement, first of all for rural population, and separate social and demographic groups, who has insufficient competitiveness on labor market; perfectioning branches and territorial structure of employment; maintaining quantitative and qualitative (vocational) equation of supply and demand of labour on labour market; improving of quality, professional and territorial mobility of labour.

With a view of improvement of quality of labour and its competitiveness on labour market there provided: maintenance in educational institutions of closer coordination of their specialization and directions of training with current inquiries of labour market and occurring structural transformations; creation in all areas of the country specialized professional colleges on training managers-organizers of manufacture in the sphere of small-scale business at the expense of changing the specialty of professional colleges which conduct training of younger specialists, who has not sufficient demand for regional labour markets, and development of services of bodies on work regarding education and improvement of professional skill of unemployed.

Competitiveness of national economy in the modern world is defined by ability to create and master most complicated high technologies, maintain new technological level of production and adapt to conditions of information environment. All this possible only at high level of literacy and society intellectual development that depend on the state policy in the sphere of education.

In Uzbekistan there realized effective and purposeful state policy in the sphere of education. Thus general concept of development of educational complex in the conditions of transitive economy have become the part of general strategy of economic transformations considering features of development of such subsystems of market economy, as labour market.

As market economy shows high requirements to qualification level of specialists, growth of their social mobility, professionalism. There is important interaction of higher education system with labour market with a view of maintenance of equation of supply and demand of qualified personnel [1].

All it has been considered at a choice of Uzbekistan which is its own way of development aimed at formation of socially focused market economy, in the greatest measure meeting not only to conditions and features of all country as a whole, but also to the interests of its citizens. The market can become a reality only when there generated corresponding psychology, outlook in society and people, who has received necessary skills and knowledge that will start to operate in compliance with new economic conditions as well. The President of the Republic of Uzbekistan I. Karimov absolutely fairly noted that, ". without change of education system and upbringing youth, it is impossible to change consciousness".

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Therefore one of the major problems of market reforms is development of educational complex.

Education is one of the key components admitted by the world community defining the level and quality of population life. In contra distinction from other countries, Uzbekistan began large-scale reforms in the sphere of education among the first despite all difficulties of transition period. There developed and realized National program on professional training which became general strategy of the reform of educational system of Uzbekistan on long-term prospect.

As a result of reforms transition to 12year education training was completely finished. According to it for years of independence expected duration of training with 13.7 till 15.6 years (table 1) has raised.

Expected duration of training is more applied indicator in world practice which is widely used comparisons and estimation of standard of well-being among countries. Uzbekistan is included in the group of developed countries with high level of income and takes the lead over the countries with average level of index of human development.

Taken measures and aspiration of the youth to raise their educational potential led to that level of literacy of adult population and Uzbekistan reached one of the highest places in the world – 99.6%. This level corresponds to such developed countries, as Germany, Great Britain, France, Belgium, and Sweden. In Russia, Italy, Bulgaria this indicator makes 98%, USA - 97%, Germany - 95%. Education index of Uzbekistan calculated by methodology of United Nations made 0.92 it has taken a level above the average – 0.77 in the world. On the value of index of education Uzbekistan takes the lead over many countries entering into European Union, industrially-developed and fast progressing world countries (Romania, Croatia, Hong Kong, Qatar, Kuwait, Mexico, Malaysia, etc.).

Comparisons among countries show that there are high expenses on education in Uzbekistan. As a whole for the years of independence the share of expenses on education has increased from 17.9 % to 33.8 %in the state budget.

It is necessary to note that indicators of expenses on education in Uzbekistan exceed a similar indicator not only within the limits of the countries of Central Asia and CIS, but also any state of European Union. The result of such large scale financing of education system has become building and reconstruction of academic lyceums, professional colleges and comprehensive schools.

Today knowledge and mental potential defines efficiency of any social and economic system, without them its technical and economic progress is unachievable. The society in which the knowledge is a capital has the right to consider higher professional training as a major resource and with good reason can make higher requirements to it.

Education system, being a major element of public life and state system should be directed on the decision of such strategic problems as:

- increasing standard of well-being of citizens;
- maintaining social stability, development of institutes of civil society;
- maintaining safety of citizens and the state;
- maintaining demand of labour market in qualified personnel;
- participation in development of national innovative system and maintenance of competitiveness of national economy.

Dynamical development of educational sphere is pledge of economic and social development of the country. Maintenance and technology of education should correspond to requirements of modern society and economy, financing and government mechanisms and create favorable conditions for development of education system. Issues of availability and quality of education require solutions which are actual essential for citizens of the republic.

As Kachalov V.A.marks "... quality in education is not only results of study, but also it is a system, model, organization and procedure which guarantees that students obtain complex personal and social development which allow them to bring the contribution to the progress and society improvement as a whole" [2].

Modern economic situation is characterized by raised risk, uncertainty and dynamism of environment. Professional training also experiences serious impact of the changes that influences conjuncture of demand for specialists of different profile. Modern high school preparation in the republic is practically conducted only in full-time tuition that has both positive and negative aspects. On the one hand, quality assurances of education are improving, but, on the other hand, preparation volumes at higher school have essentially been reduced. Today the republic is considerably behind from other CIS countries on quantitative parameters of high school preparation. At some future time such situation can lead to deterioration of educational level of employed population. As a result of alternation of generations in the part of employed population, starting from 2020 the share of certificated workers will be reduced as a part of cumulative labour. Decrease in saturation of economy of highly-skilled personnel is included into the contradiction with general strategy of acceleration of innovative development of the republic as innovative personnel are trained only in higher education system.

As a whole the analysis of current situation of educational complex of Uzbekistan, including the

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Table 1: Education system of Uzbekistan in the context of world standards

No	Indicators	Achieved level	Countries		
			high level of income	high level of income	low level of income
1	Expected duration of training, years	15,6	15,9	12,4	9,6
2	The Index of educational level (index)	0,92	0,97	0,84	0,58
3	Literacylevel, in %	99,6	100,0	96,9	75,2
4	Expenses of the state budget on education,in %	33,8	12,3	14,2	13,1
5	State expenditure on education, in % to gross national product	7,5	5,1	4,5	3,2

system of training qualified personnel, testifies necessity of its further reforming according to new conditions of development of the republic. In the process of realization of market reforms in economy there are necessary adequate steps to development of educational complex of the country.Thus, achievement of the object calls for continuation of reforms of professional school; it is possible to carry to a number of basic directions:

- reorientation of all activity of professional school from the solution of a problem of satisfaction of requirements of individual in education reception to satisfaction of concrete requirements of labour market in specialists who are in demand;
- adaptation of educational institutions of the republic to low levels of budgetary financing and for solution of this problem it is necessary to recreate the system of social partnership of professional training with subjects of labour market: associations of employers, employment service etc.;
- introduction of the major element of market economy - a competition between educational institutions will lead to the change of education and will increase possibilities of a choice to obtain quality education in Uzbekistan who are interested in it.

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Some Aspects of Creating Labor Potential In The Family

Alisher Kh. Sabirov
PhD, associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

The article considers some aspects of creating and developing labor potential in the family, role and importance of family investment in human capital. We came to the conclusion, that in the Republic of Uzbekistan, for creating human capital with high intelligence, which is characterize of originality, curiosity, imagination, intuition, creative thinking as intellectual process of creating a new thing, emotion and empathy, creative approach to the profession, it is necessary to make a number of measures at different levels and it requires creation of management system, development of strategy and use of human capital in innovation and investment cooperation between education, science and production, development social partnership keeping in mind that state plays an important role in shaping overall human capital, and leading role and priority to creation of labor and creative potential of individual will always belong to the family.

Keywords :labor potential, family, family investment, investment in human capital

1 Introduction

In any society, family fulfills the main functions of creating labor potential. It has not only mechanism of human reproduction, but also investment in human labor potential. Many scholars show the importance of family in creating labor potential and subsequently the importance of labor in improving national economy. Thus it is not surprising when extensive researches were performed to evaluate how labor potential was created in the family.

Thus the objective of this article was to provide some aspects of creating and developing labor potential in the family, as well as role and importance of family investment in human capital.

2 Discussion

In any society, family fulfills the main functions of creating labor potential. It has not only mechanism of human reproduction, but also investment in human labor potential. Well known American scientists K.R. McConnell and S.L. Brue in their book "Economics" wrote that: "Investment in human capital is any action that increases skills and abilities, and thus labor productivity of workers. The expenditures that enhance one's productivity can be seen as investments because operating costs are carried out with expectation that they will be compensated many times in future".

As it is known, the sources, of investment in human capital are state, non-governmental organizations and foundations, industries and regions, individual firms and businesses, households, international foundations and organizations, as well as a system of social and educational institutions.

Family, in this approach is also a subject that invests. Considering that the process of formation of individual's employability occurs at early stages of human development, that is, in the family, role of the latter, as a foundation in creating labor potential of society, much more than above-mentioned subjects of investment.

The educational level of parents in the family, quality of life and health are reflected in the level of investment that develops capital of health and intelligence of child, and later potential employee. The level of health, physical and mental development cause human participation in certain types of employment. At the same time much depends on external factors such as environment, health and education systems, availability of social infrastructure, etc. in which there implemented investment process of human individual in the family. The family, as we know, by its socio-economic essence is a mechanism for increasing beneficial effect on investment in human capital. Investing in the family, birth of children, increasing cohesion of the family improve not only social status of the family and its individual welfare, but also affect the condition of total human capital at the national level, improving

their well-being in general.

Thus, investment functions of the family, arising from the uniqueness and specificity of family institution, extend far beyond the object of investment in human capital. At the same time, it should be noted that continuous process of educating a new person in the family, initiated by parents, increases qualitative and quantitative characteristics of individual human capital, contributes to its performance in the future.

Within the society above mentioned features influences on creation of quality of human resources. In its turn, we can state that "quality of labor resources" is a relative, changing measure, capable for continuous improvement, getting its start in the family.

However, it should be noted that in case of family investment in human capital there is a real possibility of reasonable flexibility in labor division, that is not possible with other forms of organization of activities, and it allows in the conditions of our country, to engage women with young children partly and other categories of people, non-competitive on the job market in labor activity.

Thus, it makes sense to say that the contribution of the family in human labor potential is the cost of tangible and intangibles family resources for creating and developing physical and spiritual properties of its carrier, the result of which is improvement of its quality characteristics both at the level of individual, and at national level.

However, it should be noted that in the process of family investment the priority is given to the development of intellectual properties and qualities of individuals, which is dictated by the trends of change in the content of work. It is known that human intelligence determines such important components of human capital as experience, knowledge and ability to make innovations and creativity. Innovative culture is perceived today as an objective reality, which has beneficial effects on production and economic indicators of activity. It is appropriate to note the interrelation "human capital" and "intellectual capital" categories. These categories are based on the location and functions of a person in the economic system, including family, his ability to work and so initially these categories have a lot in common. At the same time they are used to study various aspects of human participation in economic relations and at the same time, as a rule, "intellectual capital" is considered as a constituent element of more general concept "human capital". Thereupon, creating innovation culture of individual in the family needs to develop creative potential of a human. Shortly its characteristics are: originality, curiosity, imagination, intuition, creative thinking as intellectual process of creating a new thing, emotion and empathy, creative approach to the profession and etc.

In our opinion, in the Republic of Uzbekistan, for creating human capital with high intelligence and above mentioned characteristics it is necessary to make a number of measures at different levels and it requires creation of management system, development of strategy and use of human capital in innovation and investment cooperation between education, science and production, development social partnership keeping in mind that state plays an important role in shaping overall human capital, and leading role and priority to creation of labor and creative potential of individual will always belong to the family.

3 Conclusion

We came to the conclusion, that in the Republic of Uzbekistan, for creating human capital with high intelligence, which is characterize of originality, curiosity, imagination, intuition, creative thinking as intellectual process of creating a new thing, emotion and empathy, creative approach to the profession, it is necessary to make a number of measures at different levels and it requires creation of management system, development of strategy and use of human capital in innovation and investment cooperation between education, science and production, development social partnership keeping in mind that state plays an important role in shaping overall human capital, and leading role and priority to creation of labor and creative potential of individual will always belong to the family.

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STIMULATING CO-PAYMENT AS A FORM OF REMUNERATION AND ITS LEGAL REGULATION

Alsu G. Enikeeva
Senior teacher, Tashkent Branch of Russian Economic University
after G.V. Plekhanov, Republic of Uzbekistan

Abstract

For sustainable economic development of modern enterprises of the Republic of Uzbekistan, their management should pay significant attention to the incentives in the remuneration policy for staff as a way to synchronize economic interests of employees and employers and, in particular, the conclusion of contracts between them and their legal regulation.

Keywords : wage policy; material motivation of the personnel; stimulating co-payment; legislation in the field of remuneration; legal regulations of incentive bonuses for the enterprise

In the Russian Federation, as well as in the Republic of Uzbekistan, relationship between employer and employee regarding the establishment and implementation of incentive payments are governed by rules of labor law.

Stimulating bonuses and allowances are regular payments to the employee in addition to their flat-rate payment for work. Incentive bonuses and allowances are normally installed in connection with such circumstances as a professional skill, proficiency, work experience, academic degree, academic rank, knowledge of foreign languages, performing works of special complexity or special importance to work with confidential information, the combination of professions (positions), expansion of service areas, the increase in volume of work performed, management of staff and others.

By law, incentive payments are recognized as a part of employee's salary and considered in the calculation of its average.

The main legal principles and rules that act on the incentive payments include:

- prohibition of any discrimination in establishing and changing the payments;
- establishment of payments depending on the qualifications of the employee (professional and business skills), complexity of work, quantity and quality of labor; and
- inadmissibility of the deterioration of terms of payment of a specific employee compared to the labor laws, collective agreements, social and partnership agreement and local normative acts of the employer.

If incentive payments are used by the employer, their system should be set at the level of the employer (local level) as a part of the wage system. The system of incentive payments, applied to specific employers, may be established by collective agreement, social-partner agreements or local regulations of the employer in accordance with the labor laws. Collective agreements and social-partner agreements currently are not applicable in all cases. At the same time, the system of incentive payments should be recorded as an appropriate legal instrument. Therefore, employers currently have broad legal possibilities for regulation of systems and conditions of incentive payments to employees by adopting their own local regulations (regulations, policies, and others).

Since local normative legal acts of the employer contain provisions of labor law, i.e. binding rules, implementation of which is provided by the power of the state (the court, the labour inspectorate and other authorities) it is necessary to be very attentive and careful as it relates to the preparation and adoption of such acts. It should include detailed and clearly formulated conditions and procedures for varying payment terms of the acquisition of the right to payment of the employee, as well as cases in which the worker cannot have this right.

In turn, the specific employee incentive payments are set by their employment contract in accordance with the operating system of the employer of such payments. Used incentive payments must be at least listed in the employment contract.

Introduced incentive payments may be changed, canceled or amended, including initiative by the employer. The establishment of certain incentive payments is mandatory under the law. For exam-

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ple, it is mandatory in cases of overlapping jobs or increasing the scope of work. Other incentive payments are administered at the discretion of the employer or by agreement of social partners, if it is necessary to create incentive for employees in connection with their work.

Tax aspects of legal regulation of incentive payments deserve attention, especially in the context of employer's payment of corporate income tax.

Proper application and establishment of one or another incentive payment by the employer requires, above all, their specific classification for the intended purpose, which determines both the form and content of the link of the incentive payments with main (tariff) earnings are as follows.

1. Systems linking remuneration with the basic performance indicators and over-fulfillment of work beyond core labor standards (labor duties) by the employee. These include various bonuses for the main results of the work and order of payment for exceeding standards by salaried employees. These types of incentives are the most common by both the number of employees, and by the ratio to the wage. Their distinctive feature: they tend to have clear quantitative parameters, to monitor the level of accrued wages of both the employee and their immediate supervisor.

   Bonuses for the main (current) results of operations take the main place among the incentive systems. The employer and the employee must be clear about the requirements needed to ensure that the system has established a reasonable relationship between the results of work and remuneration, i.e. adhered to one of the fundamental principles of wage – dependency of remuneration received on the results of labor.

   First of all, performance bonuses should be consistent with the production in this division of the organization and depend on the efforts of collective or individual employee.

   Awarding of main results of operations may be combined with both salaried and time-based wage system. At the same time as the base level of premiums it is reasonable to take the tariff wage for time worked (or volume of work), not including personal allowances and additional payments not related to the terms of such performance. If an employee performs several jobs, which are independent in terms of parameters and conditions of awarding, an employee needs to be rewarded for each job in accordance with the system of bonuses for it.

2. In addition to the bonuses for the basic performance of the organization, the system linking pay with personal or professional qualities of an employee, level of their professional skills and individual achievements should also be applied.

   Typically, these types of incentives include a small number of employees who achieve high efficiency of their working hours or demonstrate high professional performance, not accounted for by other incentive systems, or if employees actively participate in the collective work, contributing to obtaining a better result of collective work which must always be valued above individual achievements of the employee.

   A distinctive feature of bonuses and allowances as a form of encouragement is that they do not have precise quantitative correlation between the results of each employee and the amount of their remuneration. In most cases, this connection is established at the level of principle, rather than an exact quantification.

   With regard to the allowances, they can be anything, it is only important that they be differentiated based on employees' professional qualities.

   In order to avoid unnecessary expansion of this form of incentive, it is advisable that all allowances for professional skill are set within a certain amount of funds allocated for these purposes (for example, 7-10% of the basic pay fund).

3. Systems linking the basic salary of the employee or group of employees with specific achievements, not being systematic, or any collective results of work over a sufficiently long calendar period (half a year, a year).

   These payments include various bonuses and lump-sum compensation for the performance of critical production tasks, winning production competitions, reward based on the results of the company for the year (or half-year, quarter) and so on.

   A distinctive feature of these kinds of promotion is their flexibility. As a rule, they do not turn into a mechanical increase to employees' wages. At the same time, by applying them, the employer is not bound by obligations to employees. With one-time bonuses and rewards, the management of the organizations and their structural units encourage workers to develop the qualities that although affect effectiveness of production, but do not have clearly defined quantitative indicators (e.g. discipline, authority in the collective willingness to help in the event of manufacturing difficulties, general and professional culture, integrity, and so on).

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The most common forms of remuneration in the non-budgetary sector of economy are the award on the basis of the organization's work for the year (half a year, quarter). In practice, there are two main organizational forms of incentive payments: complex and simple. Complex one typically includes traditional approach to differentiation of remuneration: the size of the wage, the length of service, the type of work (production sites), working conditions in the workplace, importance (deficiency) of certain professions. A simplified form of lumpsum payments has no differentiation, except for the size of basic salary.

The one-time reward for performance of critical production tasks can be an important economic lever for the resolution of arising of unforeseen situations in the manufacture (elimination of failures, malfunctions, natural disasters and others).

A number of organizations preserved the tradition of a single premium payment during the professional holidays, personal anniversaries, anniversaries of the company. In addition, the leaders of many organizations revive competition in the industry; in this regard there is a need to encourage one-time winners. It is worth recalling some instances that have proven themselves in practice.

In practice, the idea of a place of incentive payments in employees' wages often does not coincide between employers and workers. The employee needs guaranteed pay, so they want incentive payments to be a lesser part, and basic salary to be bigger. The employer, on the contrary, believes that guaranteed (tariff) payment should occupy as little space in the structure of earnings and the variable portion needs to be increased.

The employer is not obliged (a right that they may not use) to introduce incentive awards, bonuses and allowances.

If the employer exercises their right to establish incentive payments, they are obliged to take into account the views of the workforce, and then to reflect this intention in the collective agreement with employees. Premiums, bonuses and allowances as part of the forms and systems of remuneration are subject to collective bargaining of workers and employers. This means that, in practice, workers negotiate with the employer, not only remuneration for the performance of their duties in the form of a flat-rate, but also on the conditions of payment for work outside the scope of employment duties (labor standards), in the form of bonuses, allowances, premiums, etc.

Competent legal registration of incentive payments at the local level and in the framework of an employment contract with a particular employee makes them effective and reliable means of encouraging the behavior that is expected of employees by the employer.

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PERSPECTIVES OF USING MONTE-CARLO METHOD TO VALUE INTELLECTUAL PROPERTY ASSETS

Andrey V. Frolov[1] and Elena R. Vasileva[2]
[1]teacher, [2]senior teacher, Tashkent Branch of Russian Economic University
after G.V. Plekhanov, Republic of Uzbekistan

Abstract

Monte-Carlo method was originally designed to model physical and mathematical problems.However, variations of this method also provide a powerful tool to effectively estimate risk and uncertainty, particularly in the context of determining intellectual property values related to strategic decision-making. This article is intended to reveal the most crucially important aspects of using Monte-Carlo method in valuation analysis practice.

Keywords : technology-based intellectual property assets, valuation analysis, Monte-Carlo method, patent, trademarks, risks, uncertainty

Nowadays, technology-based intellectual property assets, usually protected as patents or commercial secrets, are typically valued using the same three common approaches as they are used to value tangible assets of the enterprise. These approaches include income approach, market approach and cost approach. However, technology-based intellectual property assets (and many other intellectual property assets including patents and trade secrets unrelated to technology, along with trademarks and copyrights) pose many unique challenges to a valuation analyst.

Income approaches are often difficult to implement for a variety of reasons, including difficulty in quantifying the portion of a product or service's cash flows that are attributable to the subject intellectual property asset.

Market approaches are also often difficult to implement for many reasons, including the fact that intellectual property assets are, by definition, unique. As such, comparable market transactions are often difficult or impossible to find. Thusintellectual property assets are not traded on public markets and the transactions themselves are typically confidential, there are few public sources that reveal deal details that would be sufficiently comparable to be used to implement a market approach. The vast majority of companies provide incomplete data relating to intellectual property issues.

Cost approaches are often difficult to implement because the cost to create the subject assets is almost always unrelated to the value of the asset (income generation, cost savings, etc.) that can be gained from use of the asset.

However, in addition to these challenges, it is necessary to note that the most difficult issue associated with valuing technology-based intellectual property assets is accounting for significant risks associated with many of those assets. Accounting for risk is particularly difficult in the very common situation when technology-based intellectual property assets are valued prior to any significant commercialization success; i.e., when the assets areat early stage.

Early stage of technology-based intellectual property assets are inherently risky for a variety of reasons, including, but not limited to:

- expected uniqueness of intellectual value is ambiguous;
- patent for the object of intellectual property can be challenged in the courts by competing companies;
- commercial confidentiality cannot be guaranteed in the long term;
- practical application of technologies developed varies depending on many factors related;
- implementation of the subject technology into products and services may be difficult or impossible;
- manufacturing scale-up may not be technically viable;
- costs of research and development, product integration, and manufacturing scale-up may be much higher than anticipated, perhaps even prohibitively high;

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- market success has not been convincingly proven and often cannot even be tested until late in the product development process;
- regulatory authorities may refuse to approve the developed project for reasons of environmental safety;
- unanticipated safety and efficacy issues may arise related to the in-process or finished product;
- innovation may be moving at a rapid pace, causing economic life of a particular technology to be unknown and, perhaps, short-lived.

Risk and uncertainty associated with early stage, technology based intellectual property assets can be addressed by valuation analyst through a number of methods, including:

- performing significant tasks to identify, understand, and assess various areas of risk and uncertainty;
- when using income approach, adjusting discount rate used as part of a discounted cash flow model to reflect identified and assessed risks;
- using sensitivity analysis to understand effect on value from changing certain variables;
- developing various scenarios (best, likely, worst case, etc.);
- implementing decision-tree analysis.

In addition to these and other methods, the use of Monte Carlo simulations in conjunction with income approach provides the valuation analyst with a flexible, powerful tool to perform valuations of early stage, technology-based IP assets. Taking into account the nature of Monte Carlo simulations, they are particularly useful when valuation is being performed to support strategic decision-making.

Monte Carlo methods are a broad class of computational algorithms that rely on repeated random sampling to obtain numerical results. They are often used in physical and mathematical problems and are most useful when it is difficult or impossible to use other mathematical methods. Monte Carlo methods are mainly used in three distinct problem classes: optimization, numerical integration and probability distribution.

In physics-related problems, Monte Carlo methods are quite useful for simulating systems with many degrees of freedom, such as fluids, disordered materials, strongly coupled solids, and cellular structures. Other examples include modeling phenomena with significant uncertainty in outputs such as calculation of risk in business and, in math, evaluation of multidimensional definite integrals with complicated boundary conditions. In application to space and oil exploration problems, Monte Carlo is based on predictions of cost overruns which are routinely better than human intuition or alternative mathematic methods.

In principle, Monte Carlo methods can be used to solve any problem having a probabilistic interpretation. Monte Carlo simulation performs risk analysis by building models of possible results by calculating a range of values-a probabilitydistribution-for any factor that has inherent uncertainty. It then calculates results over and over, each time using a different set of random values from the probability functions. Depending upon the number of uncertainties and ranges specified for them, a Monte Carlo simulation could involve thousands or tens of thousands of recalculations before it is complete. Afterwards the analyst produces distributions of possible outcome values.

Monte Carlo method is a probabilistic technique that allows the analyst to run many scenarios to arrive at a probability weighted distribution of possible asset values rather than arriving at a single value as is the case for many other valuation methods. Monte Carlo method is mostly used in conjunction with application of an income approach to valuing early stage, technology-based intellectual property assets. Compared to a traditional discounted cash flow model that generates a single net present value result, the Monte Carlo model, available through various software programs and Microsoft Excel plug-ins, gives user flexibility to assign various probability distributions to key assumptions and run a large number of trials to determine a distribution of net present values based on the variability assigned to key assumptions. In doing so, the users of the model are able to better account for the inherent uncertainty in predicting the future value of key assumptions and, therefore, provide a more holistic look at the potential value of relevant intellectual property assets. As mentioned earlier, estimating the value of early stage, technology-based intellectual property assets often involves a considerable degree of uncertainty, given the vast number of possible values of many of the key assumptions that can affect a discounted cash flow model.

As one example, estimate of total future research and development costs are expected to be incurred to complete or implement an in-process technology, and timing of such expenditures could vary significantly as of the date of the valuation. Monte Carlo method allows the analyst to account this inherent uncertainty of values related to key assumptions in thediscounted cash flow model by assigning 1) various potential values, or range of values, for each relevant assumption/variable and 2) probability distribution of varying types. Discounted cash flow model can then be run multiple times to generate a range of potential values using these different

potential inputs.

It is not uncommon to run tens of thousands of trials, if not more, to generate an accurate distribution of possible net present values. Essentially, the program is simulating all the possible net present value outcomes, given the variables, variable ranges, linkages between the variables, and distributions of these variables provided by the valuation analyst. Many assumptions are used when valuing early stage, technology based intellectual property assets.

When using Monte Carlo method, user has capability to decide whether each assumption is a single value or whether it would be best to use a probability distribution to assign a range of values to assumption. The type of probability distribution assigned to the assumptions are flexible in that the user can define the type and shape of the distribution along with the mean, standard deviation, and any upper or lower bounds. Thus, one of the main reasons for choosing Monte Carlo model as the basic method of research is a significant variability of possible outcomes from our key value variables.

Some of variables and related potential outcomes may be discreet. Such as study "Will the product receive state authority's approval?"The answer to this question would be a simple "yes" or "no" with assigned ranges of probabilities associated with each. However, other variables had three or four possible outcomes with differing probabilities of occurrence. In addition, other variables have continuous distributions of various kinds.

Once all variables have been identified and their ranges and probability distributions selected, the valuation analyst can perform many runs of thediscounted cash flow model to determine the resulting unique net present value. For each run the software selects a specific value for each of the variables based upon the range, distribution, and probability of outcomes provided for each variable. The distribution of possible net present values, or outcomes, generated as a result of running discounted cash flow model multiple times with various combinations of values for the variables, provides a probability-weighted range of net present value outcomes accurately reflecting the multiple combinations of the ranges, distributions, and probabilities input for each the key variables.

As mentioned earlier, risk and uncertainty are often addressed in discounted cash flow model through the determination of a single, appropriate discount rate. However, when dealing with early stage, technology based intellectual property assets, this approach may have certain challenges. In particular, by combining a plurality of individual elements of risk in a single discount rate there is a risk of subjectivity significance of individual risks.The advantage of Monte Carlo method is precisely that it allows the analyst to avoid subjective assessments by making use of cash flow projections to reflect risk and uncertainty instead of a single cash flow discount rate.

This is advantage because the specific risks formerly bundled together in the discount rate which can be much more closely analyzed and quantified through their effect on the net present value of projected future cash flows.

Especially where there is great uncertainty and complexity, the Monte Carlo method allows the user to explicitly model the distribution of risks around key values based on the best current information and expectations. The software performs the tens of thousands of computations necessary to model the interactions of the various key variables into a resulting range of probability-adjusted net present value outcomes. As a result, Monte Carlo method allows the analyst to make statistical statements around various predicted outcomes of discounted cash flow model.

In this article we introduced Monte Carlo method; one ofseveral commonly used financial modeling tools employed by intellectual property-valuation analysts. The Monte Carlo method is particularly effectivewhen used to determine the value of early stage, technologybasedintellectual property assets and is well suited to address valuation issuesin the context of business operating and strategic decision-making.However, compared to the use of many other valuation tools,implementation of the Monte Carlo method has certain challenges.For instance, use of Monte Carlo method can involve someinitial investment of time devoted to understanding the techniqueand related software. In addition, the use of the technique oftenrequires additional time not necessarily required of other methodsto model the variables and to perform themore detailed modeling.

Consequently, it is important for the analystto carefully evaluate each particular valuation opportunity in lightof the particular costs and benefits associated with MonteCarlo method before making the choice to use this method. Withthat said, that if the choice ismade to invest in the Monte Carlo method, analyst is typicallyrewarded with insightful and intuitive outputs accurately reflectingthe various risks associated with intellectual property being valued.

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Estimation of Labor Potential of The Enterprises of Small Scale Business

Gulnara K. Abdurakhmanova
PhD, associate professor
Tashkent State University of
Economics, Republic of Uzbekistan

Abstract

In the article there considered labour potential of small business as a factor of formation of innovative economy of the region. There given author's interpretation of the stages of development of small business, "labour potential" category and possibilities of effective utilization of labour potential of small business in the conditions of formation of innovative economy of the region.

Keywords :small business, market economy, labour potential, economy of the region, innovative economy, efficiency.

Small business represents a major element of market economy without which the state cannot develop harmoniously. It depends to a large extent on the rates of economic growth, structure and quality of gross domestic product.

The tasks solved by means of small business are smoothing fluctuations of economic conjuncture by mechanism of balancing of supply and demand; development of healthy competitive environment of economy, creating the system of strong motivational stimulus for fuller use of knowledge, abilities, energy and diligence of population; creation of significant amount of new workplaces, formation of major social stratum of society - middle class; development of innovative potential of economy, introduction of new forms of the organization, manufacture, sale and financing.

Small business development creates preconditions for accelerated economic growth, promotes diversification and saturation of local markets allowing at the same time to compensate market economy costs (unemployment, tactical fluctuations, crisis phenomena).

Small business maintains high potential for optimization of ways of development of economy and society as a whole. Prominent feature of small enterprise is high intensity of use of all kinds of resources and constant aspiration to optimization of their quantity, maintenance of the most rational merit for the conditions of proportions. Practically it means that at small enterprise there cannot be an unnecessary equipment, float of raw materials, superfluous workers. This circumstance is one of the major factors of achievement of rational indicators of economy as a whole.

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The interest to the role of labour potential of small business in the conditions of formation of innovative economy accounts for by many reasons. First, it is a subject of economy of new type - economy of knowledge. Second, use of labour potential of small business provides growth of population employment, solution of many social problems. Accordingly effective development of economy of the region in modern conditions is defined by a level of development of small business, presence of labour potential and its professional readiness.

One of the necessary conditions of successful functioning of small business and growth of economy of the region is utilization of labour potential, first of all its professional skills.

Labour potential of the enterprise is cumulative labour capacity of its team, resource possibilities in the field of work of list structure of the enterprise proceeding from their age, physical possibilities, available knowledge and professional skills.

Labour potential of the enterprise includes several age groups of workers possessing different potential possibilities, which characterized by edu-

cational, professional and qualification level, and working experience on a chosen degree subject. It is formed under the influence of technical and organizational factors.As each enterprise is equipped with the necessary equipment for realization of production taking into account specialization.

Parameters of labour potential are divided into two groups:

- Parameters characterizing social and demographic components of labour potential of personnel of the enterprise: agestructure, educational level, family structure, state of health, etc.
- Parameters of industrial components of labour potential of the enterprise.

During estimation it is necessary to define quantitative and qualitative aspects of labour potential of the enterprise. For the characteristic of labour potential from the quantitative aspect there used such indicators, as:

- Number of industrial and production personnel and the personnel of nonindustrial divisions.
- Amount of operating time, which is possible to working off at normal labour efficiency standard (borders of possible participation of a worker in labor).

The qualitative characteristic of labour potential is directed on estimation:

- Physical and psychological potential of personnel of the enterprise (ability and inclination of a worker to work – stateof health, physical development, tolerance, etc.)
- Volume of general and special knowledge, labour skills and abilities causing ability to work of certain quality (educational and qualifying levels, fundamental nature of preparation, etc.)
- Quality of the personnel as subject of economic activities (responsibility, conscious maturity, interest, participation in enterprise economic activities, etc.)

The quantitative characteristic of personnel is measured first of all by such indicators, as list, attendance and average number of workers.

As a whole there is necessary a certain generalizing indicator which would characterize value of all different factors of quantitative and qualitative characteristics of labour potential of the enterprise. Then it would be possible to compare sizes of labour potential of managing subjects for this or that moment of time on various teams to reveal influence of separate factors on its general size which would simplify a choice of personnel selection and facilitate more effective utilization of labour potential.

This estimation of labour potential can be applied and it is a conditional-natural indicator. In particular, by the results of special researches there estimated coefficients characterizing potential production capabilities of each age groups of workers. Labour potential of the enterprise is defined by average size of the coefficients where there share of these or thoseage groups intotal number serve as scales. On the basis of calculation there are specially calculated factors characterizing the relation of labour productivity of each age group to the average level.

In practice there used mark estimation of labour potential of the enterprise which is applied in relation to the indicators characterizing age, health, preparation of a worker, his or her intellectual, creative, innovative potential as well. Such a method of estimation is based on the special questionnaire and it is accessible to the analysis of each enterprise. But mark estimation reflects insufficiently the degree of use of labour potential of the enterprise.

In the Republic of Uzbekistan there is comprehensive support of development of small business and private entrepreneurship, there created favorable business environment to support aspects of small business and conducted measures on further stimulation of new small enterprises. “There taken consecutive measures on creation of maximum favorable conditions and business climate, privileges and preferences rendering comprehensive support system for accelerated development of small business and private entrepreneurship, growth of their share in national economy. Accelerated rates of development of this sphere allows to solve successfully the tasks of replenishment of home market with competitive and qualitative production, creation of new workplaces, first of all for youth, and maintenance on this basis increase of income and rise of well-being of the people. Wide field opportunities of small business are reflected in creation of industrial production in villages, development of enterprises, replenishment of home market with qualitative and competitive production, perfection of the sphere of services, increase of employment and well-being of population. Small business is mobile, it reacts relatively quickly to tactical changes of the market and consumer demand, plays an important role in creation of new workplaces, expansion of production and service market which provide requirements of population, further development of economy as a whole”.

President of the Republic of Uzbekistan Islam Karimov in hisreport devoted to the results of social and economic development of the country in 2014 and major priority directions of economic program for 2015 at the Cabinet of Ministers noted: “Cer-

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tainly, the measures on improvement of business environment and creation of more favorable conditions for development of small business and private entrepreneurship deserve support in every possible way".

As positive results of conducting state policy in small business sphere for the period till 2015 it is possible to allocate the following: there considerably simplified mechanism of granting statistical and tax reporting by the subjects of small business (registration in electronic form); growth in labour-intensive sectors ofthe industry with limiting number of workers from 100 to 200 people, there considerably expanded the access of private entrepreneurs to the source of raw materials, first of all at the expense of increase in volumes of their realization at the stock-exchange and exhibition auctions, etc.

Credits to the sum of more than 9 trillion soums were allocated to the subjects of small business and private entrepreneurship by commercial banks in 2014 or in 1.3 times more than last year, including microcredits - at the rate about 2 trillion soums, with growth for 39%. For the past five years the volume of crediting small business has increased almost in 5 times.

As a result of the accepted measures on stimulation of development of small business and private entrepreneurship during the past year there created over 20 thousand new subjects of small business without farmer and agriculture sector, and their total number made over 195 thousand which means in 2 times is more in comparison with 2000.

The share of small business and private entrepreneurship in gross domestic product formation has grown from 31% to 56 %, and in industrial output manufacture - from 12.9% to 31.1% since 2000.

In 2014 in sphere of small business and private entrepreneurship there were created more than 480 thousand new workplaces. Now more than 76.5% of all employed population against 49.7% in 2000 workin this sphere of economy.

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Social Partnership: Important Factor of Sustainable Development of Social and Labor Sphere of Uzbekistan

Irina D. Kim
Tashkent Branch of Russian Economic
University after G. V. Plekhanov
Republic of Uzbekistan

Abstract

Deepening market economy and economic relations of various segments of population determines achieving compromise between them, taking into account conflicting interests. This complex process in a society is inconceivable without formation of social partnership institution. In 2014law "On social partnership" was adopted in Uzbekistan. Its implementation requires deep analysis with regard to the condition in modern social and labor sphere. The article analyzes some aspects of its formation and development in the countries with developed market economies. '

Keywords :social partnership; deepening of market relations; social and labor sphere; compromise; consent.

In terms of further deepening market reforms in Uzbekistan formation and development of effective mechanism of interaction and cooperation of states with different social structures of society acts as a crucial condition to ensure country sustainable development, social stability and harmony in a society. Constitution of the Republic of Uzbekistan and adopted Law "On social partnership" by Legislative Chamber of the Republic of Uzbekistan on June 18, 2014 consolidated basis for formation of social partnership, through provision of the rights and freedoms of citizens, rights and legitimate interests of enterprises and associations (civil society) by state.

Radical reforms in economic, social and political spheres of the country during the years of independence served as a formation of new mechanism of social dialogue and social partnership between state and different social groups. A significant impetus to further development of social partnership was a Concept of further deepening democratic reforms and formation of civil society in the country (2010), which stressed: "The significance in ensuring further development of civil society institutions, strengthening their role in ensuring transparency and effectiveness of reform may be adoption of Law "On social partnership", providing clear demarcation of borders and improvement of organizational and legal mechanisms of NGOs with government agencies in implementation of social and economic development, humanitarian issues, protection of rights, freedoms and interests of various strata of the population".

It should be noted that this bill unlike some other countries where social partnership is mainly built between employer and employee, in its essence, has more comprehensive definition of social partnership based on conducted reforms and transformation of relations between the states and different social structures in Uzbekistan. Social partnership is a special type of relationship of various stakeholders aimed to achieve social harmony, stability and progress, solution of priority of social and economic problems. Subjects of social partnership are public authority and governance, civil society institutions and entrepreneurial activity. Social partnership is directly related to consolidation of the interests of various structures and layers, uniting on the basis of intellectual potential, human, material and technical and financial resources to achieve country sustainable development, addressing specific economic and social problems.

According to the Concept of further deepening democratic reforms and formation of civil society in the country a lot of attention is paid to decentralization of management, transfer of some functions from national level to regional authorities, city and regional level, formation in Uzbekistan such unique

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system of local government, as makhalla:

- today makhalla is an important factor of timely and successful solution to actual issues of citizens, protection of their interests. There increased contribution of makhalla in solving issues of spiritual and moral education of citizens, youth, effective functioning of social sphere, public security, law and order;

- in this regard, improvement of legal framework of makhalla institution expansion of its powers, mechanisms for effective functioning is our highest priority;• it is important to continue the work of transforming the makhalla to the center of targeted social support of the population, development of private entrepreneurship and family business;

- it is necessary to provide further expansion of makhalla functions in the system of public control over activities of management bodies; to provide close interaction of bodies of state power and administration with local authorities in order to inform public about implementation of state social programs widely;

- more increasing importance and role of makhalla in solution of actual issues of citizens, ensuring their social activity requires further improvement of election system of chairmen (aksakals) of citizens ' gathering and their advisers to secure election of aksakals and their advisers of the most worthy citizens. Social partnership has a very special place in the system of market relations. Achieving harmonious development of social and labor sphere, providing high degree of realization of labor potential should be the main result of changes in the economy. Ideology of social partnership can be formulated as follows: to ensure their effective interaction through cooperation and mutual concessions of two main social groups – employers and employees in national economy.

Public authorities should intensify economic policy from the viewpoint of stabilization of employment, thus giving major effort to stimulate production, improvement of its resources, involvement of internal resources of the enterprises and firms.

Active policy in labor market allowing increasing aggregate demand for labor and providing necessary level of competitiveness of employees themselves in the market requires significant financial cost from the state, the source of which can only be stable production. As it is known the society can be developed harmoniously and without conflict only in terms of coordination of economic interests of the state, economic subjects, i.e. firms and citizens. A particular importance is acquiring the development and efficient functioning of civilized mechanism of interaction between the state, employees and employers, based on solid legal basis. Having such mechanism each of its parties creates a basis for political and social stability in a society optimally realizing their interests.

In social environment basic terms of partnerships are: presence of numerous “middle class”; developed civil society where in the result of determination of social groups of population there freely operated unions, movements and other organizations, expressing social and economic interests of employees and employers; functioning “social state” that implements socially oriented market policy for the subjects of social partnership, which controls their execution.

Functions of social partnership in implementation of priority economic tasks in management of social and economic processes:

- participation in implementation of package of documents (strategy, target programs, forecasts of social and economic development) aimed at achieving sustainable economic growth; - promotion of initiatives of individual subjects to solve important social and economic problems, in particular, on development of small business and private entrepreneurship;

- assistance to continuous improvement of competitiveness of country economy, industries and enterprises, taking worthy place in world economic community;

- promotion of sustainable development of transport and engineering-communication systems, as a key factor for sustainable functioning economy, expansion of funding research planning and innovation; enhancing the effectiveness of state regulation of economy, strengthening the credibility of public authorities, transparency and openness of their activities;

- provision of access to qualitative drinking water, rational use of land resources, improvement of qualitative characteristics of irrigated lands;

- organization of monitoring and implementation of complex of measures on environmental protection, primarily in large and medium cities;

- broad participation of civil society institutions in economic appraisal of proposed major investment projects in fuel and energy complex, chemical industry, etc.;

- landscaping, urban development taking into account environmental requirements. We would like to note a special role of social partnership in solving important social problems:

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- consistent increasing the level and quality of life of population, bringing them to standards of developed countries;
- growth of income and employment by creating new jobs, ensuring balance of supply and demand in labor market taking into account demographic factor;
- prevention of groundless high level of social stratification by monitoring consumer prices in order to prevent unjustified rise in consumer budgets, active formation and development of middle class;
- further strengthening targeted social protection of more vulnerable layers of population first of all youth, mothers of many children, disabled people; strengthening family relations, development family business; increasing the access and quality of educational, medical and living services, development of social infrastructure objects.

In general, social partnership is intended to ensure balanced solution of the most important economic, social and environmental issues through the prism of interests' coordination that form a basis of sustainable development of the country.

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Development of Regional Labor Market Infrastructure

Jasur A. Ne'matov
Doctor of Economics, professor,
Tashkent Branch of Russian Economic
University after G.V. Plekhanov
Republic of Uzbekistan

Tajinazira S. Ismailova
Senior teacher,
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

Each state is interested in realization of effective policy in the sphere of development of regional labour market infrastructure. Degree of optimality of development of elements of labour market infrastructure basically depends on concrete social and economic conditions of the country. The conditions generally predetermine occupation level and degree of social intensity, unemployment scales. Social and economic conditions influence on the character and scales of measures of the state on development of labor market sphere of as well. Therefore it is difficult to solve this complicated issue effectively which is taken of other factors and conditions.

Keywords :infrastructure, market, labor, region, economy, reforms, process, stages, efficiency, quality, formation.

Development of regional labour market infrastructure is major priority of social and economic policy of the Republic of Uzbekistan. For years of independence in the country there have been conducted purposeful complex measures on carrying out social and economic reforms, aimed at acceleration of economic growth, creation of workplaces, decrease in unemployment and growth of well-being of population in all regions of the country.

It is known that in the conditions of market economy value-standard principles in employment sphere have radically changed. As a whole, management of employment consists of numerous subsystems, such as subsystem of formation of labour, management of the process of preparation of labour, management of process of compensation of labour, subsystem of management of processes of distribution of manpower and subsystems of management of processes of labour utilization.

In the highlight there still remain issue of creation of new workplaces, maintenance of employment and growth of income of population. President of the Republic of Uzbekistan I. Karimov underlines that "... about 970 thousand people were placed in a job as a result of realization of regional programs of creation of workplaces and maintenance of employment of population in 2014, from them over 60,3 percent - in countryside. There created more than 480 000 workplaces at the expense of development of small enterprises, micro firms and individual business and more than 210 thousand workplaces were created at the expense of expansion out work.

Development of social sphere, formation of workplaces and labour employment of population, housing development and improvement of population aggregates, further reforming and perfection of educational process and public health services will always remain in the highlight.

According to the Program confirmed by Parliament of the country there stipulated creation of about 1 million workplaces in 2015".

Regions of Uzbekistan differ from each other, both on level, and labour market structure. In each area the labour market has its specificity.

So, relatively high rates of demographic growth, non-regular population distribution on territory, agricultural orientation of economy, and simultaneously with rather high share of employment in power industry, light and food industries and not enough developed sphere of services have much influence on the condition and development of regional labour market of the Republic of Uzbekistan.

Achievement of equation of supply and demand of labour in the republic is not possible only on the basis of acceptance of centralized measures on regulation of employment of population and decrease in rate of unemployment. For this purpose it is necessary to reveal available reserves and regional sources of employment in each territorial unit.

Labour market is a major element of national market that causes importance of studying of basic laws of its development and functioning. Consecutive development of market relations in the sphere of labor and employment of population de-

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mands new and not ordinary approaches, a system in studying all elements of development of infrastructure of labour market, updating methodological base of market categories and concepts. Primary results of economic policy are reflected directly or indirectly in functioning of infrastructure of labour market, which is special social and economic mechanism.

Issues of conformity of supply and demand have great value on labour market. Now there appear a severe need in generalization, ordering of available experience of regulation of employment and the system engineering of development of labour market infrastructure that is adequate to modern conditions of economy.

Infrastructure is a major element of economic market that causes importance of studying of basic laws of its formation and functioning. In its frameworks there realized processes of purchase and sale which is a major factor of manufacture of labour. Labour market infrastructure predetermines degree of efficiency of use of work of hired workers which deliver basic mass of labour in manufacture.

Labour market is a dynamical system that cooperates, on the one hand, employers (proprietors of means of production, entrepreneurs), and with another - employee (hired workers). These subjects occupy one of the major places in the system of components of labour market. Within the limits of labour market there is a coordination of purposes, interests and requirements of employers and hired workers.

Regional labour market infrastructure as a market economy component represents the system of public relations with co-ordinated interests of employers and employee. The following characteristics are peculiar to it. First labour market is a set of economic relations between labour supply and demand; secondly, a place of crossing of various economic and social interests and functions; thirdly, from positions of enterprises, a field of mutual relations of separate enterprise and its workers, potential or actual workers, but who is thinking of transition to a new place of work within firm.

Supporters of one more point of view believe that labour market is a resource market. As a basic subjects of purchase and sale there act an employer - a buyer of work both legally free and legally protected proprietor – a seller of labor resource. a seller of labor resource is a carrier and proprietor of labour, i.e. all set of his abilities to certain kinds of labour activity. It is a special resource which specificity consists in its physical inseparability from a proprietor. The specificity is reflected in character of the object of purchase and sale on labour market. Here the object of market transaction is the right of use of the unit of labor resource of certain quality under certain conditions in a certain interval of time.

Summing up results of the last year, Uzbekistan has continued to develop steady rates of national economy, provided stable growth of standard of living of population, and strengthened our positions in the world market in 2015 despite remaining serious problems in global economy.

Modern lines of development of regional labour market infrastructure in globalization in which basis economic integration lies, internationalization of capital, goods, people and information causes occurrences of new peacemaking institutes and new national state structures. It makes huge impact on structure of economy and economic growth of the republic, manufacture of material benefits, generates set of problems among which the special place is occupied with a problem of creation of regional labour market infrastructure adequate to these global changes in the development.

Developments of regional labour market infrastructure in the conditions of globalization occupy basic value both in connection with its special role in all system of market economy, and in connection with specificity of social and demographic situation in Uzbekistan. New tendencies in economy stipulated by modernization and economy, diversification and development of the sphere of services cause shifts on labour market. In the republic there annually created 450 - 500 thousand new workplaces that create favorable preconditions and possibilities for population employment. Realization of accepted state target programs of development in the sphere of service, agriculture, out work, small-scale business has provided constant growth of creation of new workplaces.

Socially focused economy of the region has satisfaction of requirement of a person in activity as its one of the main purposes, first of all, in that sphere where it can reveal business and creative features and receives worthy for life earnings (income). For realization of such purpose it is necessary to have single co-ordinated mechanism of maintenance with workplace of everybody who is able to and wants to work in real sector of economy or the sphere of services. Today the countries, which considered to economically developed, throughout their historical development naturally have formed market mentality, system of concepts and sights corresponding to realities of market economy.

CIS countries had the way on formation of market relations in the sphere of labor. This way has certain advantages and lacks in comparison with evolutionary course of formation of labour market, characteristic for majority of developed countries which didn't use a model of planned economy in its pure form. It is necessary to carry wide experience presence to advantages on construction of labour relations in the conditions of market economy, saved up by world economic history. Pres-

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ence of such experience allows (at its skillful use) to avoid many failures and errors. Besides, management experience in labour potential of CIS countries in the conditions of planned economy has essentially expanded both theoretical sights, and a set of practical methods and receptions realized in social sphere.

Parameters of labour market infrastructure of Uzbekistan were essentially affected by that it was formed in the conditions of social and economic crisis which captured all aspects of society life. The greatest negative influence on employment was rendered by slump in production, reduction of investments, crisis of defaulted payments, social and property stratification of population. Speed of development of regional labour market infrastructure turned out that it is obviously insufficient for successful, effective economic growth.

With the beginning of XXI century a number of positive changes which allow overcoming many of those negative tendencies which characterized infrastructure of labour market in the end of XX century have been outlined in economy of Uzbekistan. Transition to evolutionary character of reforming of social and labour relations humanizes modified economic reality and allows population to adapt it. Completion of formation of labour market infrastructure occurs in the conditions providing preconditions for its effective functioning.

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Ecological Education and Its Role in Upbringing of Harmoniously Developed Personality

Nazar Kh. Khakimov Doctor of Philosophy, Professor
Tashkent Branch of Russian Economic University After G. V. Plekhanov, Republic of Uzbekistan

Makhfuza Alikulova PhD, doctoral candidate
Uzbek Scientific and Research Institute of Pedagogical Sciences, Republic of Uzbekistan

Abstract

In Uzbekistan in the conditions of deepening democratic processes and society modernization special attention is paid to the development of ecological education. Ecological education is understood as continuous process of training, upbringing and development of personality, directed on forming system of scientific and practical knowledge and abilities, and also valuable orientations, behavior and activity in the sphere of preserving the environment, steady wildlife management and consumption, formation of ecological way of life. '

Keywords :modernization, ecological formation, education, teaching, noncommercial organizations, harmoniously developed person

In the country at the stage of development of civil society occurs ecology of all aspects of life of people, beginning from daily household activity of a person and finishing its industrial, industrial and scientific and theoretical activity. There occurs ecology of consciousness and thinking of mass. It is a reflection of direct life of ecological situation on place of residence and its direct and strong influence on quality of life of individuals. Ecological approach becomes general principle of life activity. Therefore ecology is necessary for perceiving as discipline studying general laws of functioning ecosystem, an important role in which is played by youth, with its culture, mind, ethics and aesthetics, rationality, responsibility, thinking, consciousness, morality, behavior etc. Hence, issues of urgency of ecological education and region environmental problems give rise to a question of urgency: to that how and in what quality it is necessary to form ecological culture and to bring up the person. Upbringing of ecological consciousness and formation of ecological culture of personality is difficult, many-sided, multidimensional educational and training process. It is, first of all, overcoming initial passivity of person concerning environmental problems, not bearing disaster features, and also ability formation to estimate necessity of inclusion for this or that ecological situation that is one of the factors providing value of such education.

Constitution of the Republic of Uzbekistan, a number of laws and regulatory legal acts serve as an important legal basis of the sphere. In particular, the Law adopted on December 9, 1992 "On wildlife management" established obligatory ecological training in educational institutions of all types. For the purpose of organization of ecological education in preschool educational institutions, schools, colleges, lyceums and higher educational establishments according to the international standards and national values there developed and improved state educational standards, textbooks, programs, educational-methodical grants. Popular scientific brochures and manuals for parents and population are published by scientists and specialists for maintaining harmonious communication of ecological education and upbringing.

In Uzbekistan issues of ecological education of youth caused steadfast interest of scientists-pedagogues from the middle of last century as the country faced world environmental problems: drying of Aral Sea, problem of using water resources of transboundary rivers, salinization of soil, their consequences for people, storage of household waste and others. Ecology issues show complexity and long term of their decision as there are no concrete, clear, optimum decisions of environmental problems and restoration of destroyed ecological systems. Therefore ecological education as the way of dynamic life activity of a person in real conditions of society modernization is urgent.

In Uzbekistan ecological education is of paramount importance in the systems of education, upbringing and formation of harmoniously developed personality. Education system, family

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and many public institutes of civil society deal with forming ecological culture of youth. In the republic there created and carried out activity of tens of ecological non-state noncommercial organizations, including Ecological movement of Uzbekistan. One of directions of activity of non-state noncommercial organizations is carrying out various sort of measurements (trainings, seminars, round tables, etc.), directed on increase of ecological culture of youth. Ecological movement of Uzbekistan carries out measurements, picture album "Nature of Uzbekistan" was published.

TV programs devoted to the problems of ecology and issues of ecological education were shown by means of state and regional television studios in the republic. A number of popular scientific articles were published by means of mass media. "Ecological Life" newspaper and special children's ecological magazine "The Fontanel" have been published. The World day of protection of environment is celebrated everywhere.

Uzbekistan is a participant of some international conventions and agreements concerning wildlife management and its separate objects, on such global problems as change of climate, desertification, biodiversity preservation, use of water resources, rendering social support of population from ecologically problem zones and regions, etc. Representative offices of some world and regional international organizations carry out their activity in Uzbekistan.

Inculcation of ecological culture to the youth becomes one of priority directions of educational programs in modern world. In Uzbekistan special attention is paid to preservation of unique natural system, maintenance of ecological safety, rising generation education in love to the native land. One of the factors promoting prevention of environmental problems is an increase in level of ecological culture and thinking, formation of ecological literacy, views and values at youth. The key tools in this process are ecological education and education with a view of sustainable development. Ecological knowledge allows people to understand the world in which they live better, to realize complexity and coherence of social and economic and ecological issues.

Bases of forming harmoniously developed generation are in the laws "On wildlife management", "On education", National program on professional training, in the works of the President of the Republic of Uzbekistan Islam Karimov. An important feature of ecological education is a formation of responsible attitude to environment which is based on new way of thinking, assumes observance of moral and legal principles of nature management, vigorous activity on studying and protecting nature of district and propagation of ideas of rational use, preservation and reproduction of natural riches.

State committee of the Republic of Uzbekistan on nature protection together with the ministries of higher and secondary specialized education, public education carries out work on creating system of continuous ecological education and upbringing in our country, there adopted tripartite resolution "On prospects of improvement of system of development of ecological education in the Republic of Uzbekistan".

As a result of realization of Concept of continuous ecological education and Program on its realization, according to the recommendations of European economic commission of UNO there conducted work on ecological education in higher educational establishments, scientific centers, colleges, academic lyceums, schools and preschool centers, there are skilled teachers with good potential and teaching practice on training students who successfully could integrate bases of ecological education into educational process. With a view of realization of problems following from strategic and program documents, stated in speeches of the President of the Republic of Uzbekistan Islam Karimov at plenary session of summit of United Nations "Purpose of development of millennium" on September 20, 2010, at joint session of Legislative chamber and Senate of Oliy Majlis about Concept of further deepening of democratic reforms and forming of civil society in the country on November 12, 2010 State committee of the Republic of Uzbekistan on nature protection, Ministry of public education and Ministry of higher and secondary specialized education adopted joint resolution from July 19, 2011 "On Concept of education with a view of sustainable development of the Republic of Uzbekistan".

For coordination of actions of interested ministries, state committees, departments and organizations connected with formation of sustainable development in the republic, under the State committee of the Republic of Uzbekistan on nature protection the recreated Interdepartmental coordination council on education with a view of sustainable development. It included senators and deputies, representatives of ministries, departments and public organizations, and it is headed by chairman of State committee of the Republic of Uzbekistan on protection nature. According to the decision of the Cabinet of the Republic of Uzbekistan "On the program of actions on the Republic of Uzbekistan on environmental protection in 2013-2017"from May 27, 2013 scale of actions conducted in this direction is increasing.

In the ministries of public education, higher and secondary specialized education working groups are created; plans of actions are developed and carried out on realization of Concept of education with a view of sustainable development. So, subject of ecology and disciplines related to it are included in all curricula of higher educational institutions of

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the republic. Every year there trained about 320 specialists - ecologists. In state committee on nature protection there conducted Educational and industrial practices, preparation of final qualification works. At present state standards of profile higher educational institutions include components of education with a view of sustainable development, there carried out work on their further introduction. Cooperation of State Committee on nature protection with non-state noncommercial organizations in development of formal and informal education in the given area is becoming stronger. Thus, with a view of activization of ecological and educational work among children and youth for the last years there regularly carried out actions within the limits of Ecological week devoted to the World day of environment, Republican contest of ecological journalism. Also master classes, seminars-trainings for journalists and schoolchildren have been conducted. In the country there published textbooks, educational and methodical grants, teaching materials, educational films and multimedia on education for sustainable development. In partnership with non-state noncommercial organizations wide public is informed through mass media on process, benefits, methods and approaches of reorientation to sustainable development. All this is an important factor in education of harmoniously developed person.

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The Analysis of Structure and Significance of Labor Potential of The Enterprise

Nodira K. Zokirova
Tashkent Branch of Russian Economic
University after G.V. Plekhanov

Abstract

In modern conditions of society development economy represents a complicated system, one of major components of which is labor capital. The problem of development of labor potential is actual not only at the level of separately chosen concrete worker, but also in scales of the whole state. In the conditions of transformation of economy a degree of social stability of separate workers, and also social and professional groups of workers in reformed labor market (at the enterprise and outside), which is primarily defined by a level of their competitiveness, in many respects depends on development of certain qualitative characteristics of labor potential at workers.

Keywords : economy transformation, labor potential of the enterprise, sustainable development of economy, investment in human capital, demographic factors, public health care principles

1 Introduction

Labor is importance resources for a company, especially in developing countries such as Uzbekistan. Economy of society represents a complicated system, one of the major components of which is labor potential. Labour potential is closely related with the level of industrial, economic, innovative and social activity of the enterprise, providing labour and material resources and means of labour. The process of forming labour potential is based on the personnel policy of the company, the system of strategic aims of the enterprise, rules, standards, work with personnel in accordance with the factors of labour market and or organizational factors. The leading managerial factor of forming the personnel potential is the marketing of labour market.

2 Discussion

Economy of society represents a complicated system, one of the major components of which is labor potential. It is not coincidence that in the conditions of transformation of Uzbek economy, reorganization of all economic system, labor problems and in particular problems of development of labor potential is becoming acute and urgent. Degree and influence orientation on labor potential of workers in many respects defines vector of economic development, as separate enterprise, branch, and the country as a whole. A term "potential" in its etymological meaning occurs from Latin word "potentia" that means hidden possibility, capacity and force. Recently in theory and practice a wide circulation has received concept "labor potential". This concept is applied for all levels: from society as a whole, to spheres and branches of economy, separate regions and enterprises, and among them according to activity kinds, professional and qualifying groups etc. Labor potential is often used as a synonym of manpower concept and considered as a unity of quantitative and qualitative characteristics of manpower that is resources (ability to work) which able-bodied population has. But labor potential is wider concept than manpower. Manpower is limited to able-bodied population, and labor potential also includes those people who are out of able-bodied age or have not yet entered into its limits, but actually participate in social activities, including sphere of individual labor activity. Allocation of labor potential in independent economic category has practical value basic sense of which is shown at balancing resources of live work and number of workplaces. Labor potential are source, means, labor resources which can be used for solution of any problem, achievement of definite goal, simultaneously possibilities of separate person, enterprise, society, state in concrete area. Labor potential with reference to the enterprise is a limiting size of possible participation of personnel in manufacture taking into account their psychophysiological features, level of professional knowledge and gained experience. Labor potential of the enterprise as a system is always higher than a sum of parts making it - individual labor potentials of separate workers. As-

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sociation of workers in uniform and systematically organized process of labor has already generated effect of collective labor which surpasses a sum of workers' forces that operate individually. Labor potential of the enterprise includes several age groups of employees who have different potential possibilities and are qualitatively characterized by educational and professional level and work experience on chosen specialty. It is formed under the influence of technical and organizational factors as each enterprise is equipped with necessary technique to realize production process taking into account specialization. Labor potential is an integrated characteristic of a number of abilities to labor (in their quantitative and qualitative relation) which defines possibilities, as separate worker, so personnel as a whole on their participation in socially useful labor activity. It represents that part of manpower in each concrete period which possesses certain working capacity, professional training and, having age structure which is characterized for it and capable to reach concrete social and economic results at certain intensity of using labor force. Structure forming unit of formation of labor potential of the enterprise is elements of personnel labor potential. Personnel labor potential is a set of physical and spiritual qualities of the person defining possibility and limits of his participation in labor activity, ability to achieve certain results in given conditions and also improve in course of work (fig. 1).

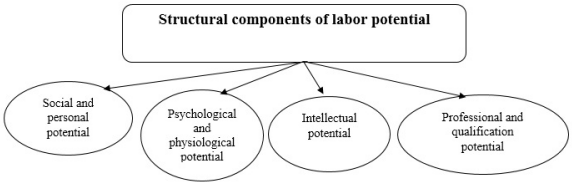

Figure 1: Structural components of personnel labor potential

Social and personal element of personnel potential includes their age, gender, work place, position, working experience, marital status etc. A necessity of this element of personnel labor potential is explained by various kinds of industrial activity of the enterprise, its requirement to these characteristics of personnel. Health, working capacity, endurance, type of nervous system and etc. are factors of psychological and physiological potential of personnel. World Health Organization Charter defines health as "a condition of full physical, spiritual, social well-being when parts and systems of human body are balanced with industrial and social environment"[who,] .

There are three making components of health in this definition - physical, mental and social. Physical health is natural state of the body caused by normal functioning of all its parts and systems. Mental health is characterized by a level and quality of thinking, development of attention and memory, degree of emotional stability and development of strong-willed qualities. Social health is defined by moral principles which make a basis of social human life, i.e. his abilities to live in concrete human society. It is characterized, first of all, by attitude of the person to work, active aversion of non social customs and habits which contradict normal way of life.

Necessary measures are taken to maintain guarantees of citizens' rights on health protection from the state In Uzbekistan. State program on further strengthening reproductive health of the population, health protection of mothers, children and teenagers for the period of 2014 - 2018 are currently operating in Uzbekistan, main principles of health protection of citizens of the country are specified in it:

- Observance of human rights in the sphere of health protection
- Availability of medical aid to all levels of population
- Priority of preventive measures
- Social security of citizens in case of health loss

An increase in production volume at decrease of expenses of working hours and work intensity are becoming possible owing to the use of special labor potential - intellectual. Those countries achieve the greatest successes in economic development and improvement of life quality where are created best conditions for realization of creative abilities of personnel, especially in the sphere of science, invention and rationalization. A structure of labor potential of the enterprise represents a correlation of various demographic, social, functional, professional and other characteristics of groups of workers and relations between them (fig. 2). Demographic factors reflect specificity of formation of economically active population, depending mainly on the level of birth rate and death rate, life expectancy, and dynamics of migratory processes as well. Demographic features of Uzbekistan are high relative density of the persons who annually enter able-bodied age. According to official statistics, in 2014 a number of able-bodied populations (from 18 to 60 years old) have made 18 million people in Uzbekistan. It has allowed Uzbekistan to become the fifth country on labor force size in the countries with transitive economy of Europe and Central Asia (after Russia, Turkey, Ukraine and Poland).

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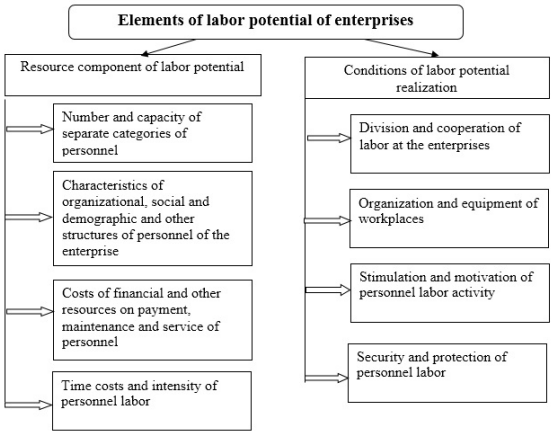

Figure 2: Elements of labor potential of the enterprise

According to forecasts, by 2025 the population of the Republic of Uzbekistan will increase by 13.9 % and will reach 34390.7 thousand people. For this period there expected reduction of a share of invalid population in general structure of population to 0.1 % and population share at able-bodied age will increase to 17.7 %. Personnel component of labor potential of the enterprise includes qualifying potential (professional knowledge, skills) and educational potential (informative abilities). Professional structure of labor potential of the enterprise is connected with the changes in work maintenance under the influence of scientific and technical progress which causes appearing new and disappearing old professions, complication of labor operations.

Qualifying structure is defined by qualitative changes in labor potential (growth of abilities, knowledge, skills) and reflects, first of all, changes in its personal component. Prominent feature of labor potential of Uzbekistan is its high educational level. Literacy rate is more than 99.0 % that places republic in one row with economically developed countries with a high level of development of human potential. Level of general and professional education of manpower is also high. Every fourth, occupied in the sphere of production of goods and services has the higher or secondary specialized education. 200 citizens out of 1000 are experts with secondary specialized education. Thus, according to educational level the Republic of Uzbekistan is highly educated countries.

Organizational component of labor potential of the enterprise includes high organization and standard of work, finding its expression in clearness, rhythms, coordination of labor efforts and high degree of satisfaction of workers with their work. Organizational component of labor potential in many respects defines efficiency of functioning labor collective as systems as a whole and each worker separately and is directly connected with effective utilization of labor potential from these positions. Public labor potential accumulating and synthesizing cumulative abilities to socially useful activity of able-bodied population of the country represents a concrete form of materialization of human factor, indicator of development level and limits of creative activity of citizens. In qualitative sense labor potential of a society is its real possibilities on realization through participation in socially useful work of all variety of personal abilities and qualities: knowledge, skills and abilities acquired by people in course of upbringing, preparation for work, directly labor activity, retraining and improvement of professional skill. And at the level of enterprise quality of labor potential is expedient to discuss as quality of personnel - a degree of conformity of its characteristics by requirements following from the purposes of managing subject and conditions of its activity, and society requirements to development of person and social relations as well.

3 Conclusion

A structure of labor potential of the enterprise represents a correlation of various demographic, social, functional, professional and other characteristics of groups of workers and relations between them. Demographic features of Uzbekistan are high relative density of the persons who annually enter able-bodied age.

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Features of Organization of Outwork in Uzbekistan

Shukhrat G. Yuldashev
Doctor of Economics, Professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov
Republic of Uzbekistan

Abstract

As it is known a number of remote workers are annually growing in the world. In Europe and the USA outwork has been used since 90-s of XX century. In this article there revealed issues of outwork organization. An essence of home labor organization concept, its connection with distant work, and also features of organization and regulationof outwork in the Republic of Uzbekistan are revealed.

Keywords :Outwork, out-worker, employer, distant work, labor agreement, social packet, working conditions, employment, stimulation, social insurance

1 Introduction

Outworker is a person who does work for a business, company, or other from home. Number of outworkers are annually growing in the world. Some issues arise relating to outworkers, both positively and negatively. Negative issues could be relating to payment, insurance, etc. [Harpur, 2007] for instance wrote that outworker are some of the most vulnerable workers in Australia. Outworkers in Australia was reported paid very low [Rawling, 2015]. The general structure of outworking renders outworkers vulnerable. Webber and Weller [Webber and Weller, 2001] argued that outworker models exploited ethnic and gender divisions within communities. Through targeting recent migrants with limited employment options, supply chains were able to force outworkers to work in conditions which were lower than factory based employees. The paper was intended to discuss issues of outwork organization in Uzbekistan.

2 Discussion

Outworkers are people who have concluded labor agreement on accomplishment of work at home from materials and with the use of tools and mechanisms given by employer or acquired by out-worker at his own expense. Out-worker can perform the work caused by labor agreement with participation of the members of his family. Thus legal relations between members of family of out-worker and employer do not arise. Distant work is a general concept, it includes any work which is done out of the office and it also include home work. It usually means production of any material product. Remote work is another kind ofdistant work. This term is usually used if the office is situated in other region. "Distant work" is actually called the work which differs from the office one exclusively by the fact that the worker carries out the obligations not at the workplace. There is also"partially distant work" when the employee comes at the office only when there is a necessity in him. Among all these kinds of distant work only home work is accurately regulated by the law.

According to Convention no. 177 of International Labor Organization "Onoutwork", the term "outwork" means work which carries out the person who is called as out-worker:

- at the place of his residence or in other premises on his choice, but not in production premises of the employer;
- forremuneration;
- with the purpose of producing goods or servicesaccording to direction of the employer, irrespective of who gives equipment, materials or other used resources if only this person has not such degree of autonomy and economic independence which is necessary to consider as its independent worker according to national legislation or judgments.

Why outwork is becoming such popular? There are objective reasons for this purpose:

- Availability of transport problems in cities-megacities which lead to great costs of time in the road;

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- ahigh rentof premises;
- searchfor new forms of organization of work for maximum use of paid working hours of workers and reception of work result with minimum costs from employer (including taxation issues);
- development and expansion of so-called "social packet" which attaches the worker to the employer and differently influences on worker's interest in productive and long work on concrete employer etc.;

In Uzbekistan outwork organization is performed on the basis of Decree of the President of the Republic of Uzbekistan from January 5, 2006 no. PD-3706 " On measures on stimulation of cooperation expansion between large industrial enterprises and production of services on the basis of development of outwork", according to Resolution of Cabinet of Ministers of the Republic of Uzbekistan from January 11, 2006 no. 4 "On realization of Decree of the President of the Republic of Uzbekistan from January 5, 2006 no. PD-3706 "On measures on stimulation of cooperation expansion between large industrial enterprises and production of services on the basis of development of outwork" and Regulationon outwork, confirmed by this Decree.

An individual can be out-worker at the age of 16 and older. In case if character of home work predetermines a necessity of concluding agreement with out-worker on complete liability it is supposed to involve people at the aged of 18 to realization of outwork.

Out-worker having concluded labor agreement with the enterprise is referred to the category of employedpopulation;he is given work record card in which the employer is obliged to bring data on conclusion and termination of labor agreement. Conditions of collective agreement of the enterprise are extended on out-workers. Equipment, tools, stock for accomplishment of works provided by labor agreement isgiven to out-worker. The employer guaranteed transport for export of produced goods to out-worker, goods acceptance is performed at point of production of works by out-worker and thus the statement is made. Work of out-worker is produced for actually performed works or production goods meeting established requirements on quality, size of salary cannot be bellow minimum size of salary established by legislation. If regional salary coefficient is established in the places whereout-worker operates payment should be produced taking into account this coefficient.

The worker receives compensation according to labor agreement from employer for expenses for used energy, water, communication, servicing and repair of machines and equipment, cost of transportation; depreciation of vehicles, tools and other equipment used for accomplishment of employer's order, being as a property of out-worker and expenses on their operation as well.

At establishment of production target for out-worker an employer should consider specifications of time for accomplishment of separate kinds of works so that general duration of working hours on accomplishment of all complex of works should not exceed normal or reduced duration of working hours established by Article 116 of Labor Code if it is stipulated by labor agreement or established by legislation (for the people who are at the age of 18 and invalids). Here it is necessary to underline that out-worker is subject to obligatory national insurance. Operating time of out-worker is included in pension appointment and benefit of social insurance.

Strengthening cooperation links of large industrial enterprises solves an important problem of increasing incomes of family budgets with out-workers allows to reduce sharply a number of unemployed population and involve its active part in production activity. Thus there provided accounting of out-workers' labor experience that grants the right to appoint pensions and benefits of social insurance. Therefore there conducted the events for development of outwork in our country. Thus, according to Decree of the President from December 26, 2013 no. PD-4589, there made changes of some decrees of the President of the Republic of Uzbekistan. Named Decree extends the periods of validity of some privileges. Thus, enterprises placing orders for production of goods (works and services) at out-workers are released from payment of uniform social payment from fund of payment at a rate of means paid to out-workers according to labor agreement to January 1, 2019.

Cooperation with out-workers allows large industrial enterprises to adjust the work on family production or development of new goods, release industrial floor spaces for hi-tech goods by transfer to out-workers of part of operations demanding greatlabor expenditures. Creation of workplaces at the expense of outwork is one of the least cost ways of production expansion.

Thus there exist some issues connected with outwork organization;

- untimely and incomplete provision of out-workers by necessary equipment, tools, stock for production of goods and services according to the orders of enterprises;
- insufficient provision of out-workers by orders that leads to idle time and, correspondingly, decrease ofpopulation incomes.
- work on revealing citizens, wishing to be engaged in outwork, is not properly conducted.

Decree of the head of our state "On measures on stimulation of cooperation expansion between

large industrial enterprises and production of services on the basis of development of outwork" from January 5, 2006 promotes employment provision and increase of population welfare. For example, there workedout-workers, producing 3 thousand pieces of flowers from plastic and fabric in a month at "Sovplastital" joint venture. More than hundreds ofout-workers of "NurKojPlast" enterprise, "Khunarmand" associations, "Khorazmshakar"open joint stock company located in Chilanzardistrict are occupied by packaging and preparing plastic items, production of doors, window frames and other goods for sale. "Kuvasaytsement" joint stock companyalso concludes labor contracts with out-workers whodeliversnecessary raw material.

Positive tendency of outwork development was also planned in automobile industries. For example, labor contracts have been concluded in four directions with out-workers for production of outworkat "General MotorsUzbekistan" closed joint-stock company specializing on production of vehicles they arefarrier, wood processing, processing of cardboard and metal handling. Out-workers produceswooden boxes, buckets, pipes for furnace and other kinds of goods from waste materials which have demand in the market and are source of additional incomes for enterprise and out-workers.

3 Conclusion

Thus, summing up all above-stated, it is possible to draw a conclusion that out work is profitable for worker and employer. A worker does not produce "superfluous" costs (on road, food in time, work, clothes answering criteria of "corporate culture" of this or that company, the most important thing is time costs). One of the most important advantages of outwork is possibility of provision of population employment and growth of income level to relatively low expenses.

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Features of Formation of Demand and Supply in Labor Market

Zafar G. Shakarov
Applicant Tashkent State University of Economics, Republic of Uzbekistan

Abstract

At present stage of transition to market economy statistical study of labor potential, its structure, dynamics and use are especially assuming significance. In labor market it is necessary to have accurate, detailed and timely information to make well-grounded decisions. The main purpose of labor statistics is quantitative characteristic of preconditions of formation of labor potential, study of its structure, characteristics of labor market, research of social, professional and territorial mobility of workforce.

Keywords : labor resources, regulation of labor market, supply and demand, population employment growth, immigration, unemployment, labor force qualification, remuneration of labor

1 Introduction

Today regulation of labor market is especially important in modernization of economy. It is important to note that its statistical research has great importance for regulation of labor market. In statistical study of demand for labor force there studied the necessity for employers to hire certain number of workers and necessary skills to produce goods and services.

Labor market (labor force) is an important multifaceted economic sphere and economic and political life of society. In labor market cost of labor force acquires its estimation, there defined conditions of employment, including value of wages, working conditions, job security, access to education and professional development.

The paper was intended to discuss features of formation of demand and supply in labor market.

2 Discussion

Labor market obeying the laws of supply and demand according to many principles of mechanism of its functioning represents a special kind of market that has some significant differences from other products of the market. Regulator is factors not only macro- and microeconomic here, but also social and social and psychological, which is not always related to price of labor force - wages.

An important factor that has a decisive impact on functioning labor market is demand - a necessity of employer for employees which has certain qualifications and professional characteristics.

Demand in labor market is formed under the influence of the following factors: structure, level of development and scales of social production; dominant forms and volume of social production; level scientific and technological development and equipment of national economy; growth and development of national economy.

Another factor affecting the market of labor force is supply which is formed because of the following main factors: average wage; number of population and demographic situation as a whole; professional structure of labor market; population mobility; ethnic, religious, cultural and psychological characteristics of the population.

In statistical observation of labor supply in labor market there studied population, proportion of able-bodied population in it, average number of hours worked by workers for a year, quality of labor and skilled workers.

Serious impact on dynamics of labor force has immigration process. It is clear that process of immigration into the country increases a total supply of labor force in labor market and enhances competition in it.

In addition, one of the most important indicators of labor market is salary, which is determined by total cost of goods required for normal activity of a person. The state determines minimum wage rate it is a point below of which it is impossible to establish wages. Besides minimum wage the state also sets minimum retirement age, benefit to disabled from childhood, benefit for elderly and disabled citizens without required work experience.

In the Republic of Uzbekistan there happened dramatic changes in sectorial structure of workforce over the last decade. There are two major trends here: sharp decline in employment in agri-

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culture and significant increase in their services in connection with its expansion and transformation into leading area of application of social labor. In addition, there is an accelerated growth of employment in knowledge-intensive sectors of economy.

The president of the Republic of Uzbekistan I.A. Karimov, speaking at solemn meeting devoted to 22th anniversary of Constitution of the Republic of Uzbekistan said: "I do not get tired of speaking about the largest and most expensive our heritage - new generation of personnel confidently entering our life with the latest knowledge, independently thinking and opinion free from all dogmas and stereotypes of the past who is capable to take responsibility for the future of country"[1].

On the basis of official sources there can be noticed dynamics of minimum wage, pensions and benefit in the Republic of Uzbekistan for the past 15 years.

As it is shown in Table 1[2] minimum wage have increased on average twice a year. At the same time the biggest increase happened in 2007 and 2008. It was about 50% while the lowest growth about 20% in 2003, 2004 and 2013.

It should be noted that increase in wages is not an indication of raising level of real incomes and living standards. "Increasing minimum wage in the Republic of Uzbekistan is primarily caused by increase in inflation in early 2000s. In 10 years inflation rate has fallen rapidly and was no more than 7% a year, that's why living standard and welfare of population has greatly increased recently"[3].

It is necessary to define population number and conduct its correlation analysis in order to determine the amount of labor supply. For this reason we use Table 2[4] below.

On the basis of data in Table 2 it is possible to make matrix of pair correlation coefficients, which defines connection between main indicators of population.

It should be noted that Table 3 shows that connection between born and labor resources are very close 0.91, and with population is more 0.96. A number of died is 0.68 and even fewer is number of arrivals 0.35 influence on labor force less. There is a feedback but at the same time close relationship between departure population and labor force.

Peculiarity of national market is in the fact that it cannot be achieved by the condition of full employment. It is positive indicator in sense of the fact that in development of national economy the availability of invalid or undeveloped resources is necessary which include human resources. Availability of free labor resources not involved in economy allows developing it. In total employment the development is completely stopped or conducted gradually.

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3 CONCLUSION

Labor market is a fundamental element of national economy. From its dynamics and state there depends functioning of national economy. In course of its functioning it is influenced by many factors.

Labor market is developing as any market according to laws of supply and demand between of which it is important to achieve equilibrium state. Therefore permanent statistical monitoring of supply and demand is necessary in labor market.

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Table 1: Changes in minimum wage, pensions and allowances in Uzbekistan for 2000-2014

Data	Average volume of increase in %	Minimum wage (soum)	Minimum old-age pension (soum)	Initial (zero) category on the single tariff scale (soum) (cancelled in 01.01.12)	Benefit to disabled from childhood (soum)	Benefit for elderly and disabled citizens who has required working experience (soum)
15.12.2014	10%	118400	231575	118400	231575	142100
01.09.2014	12%	107 637	201 526	107 637	201 526	129 180
15.12.2013	5%	96 105	187 970	96 105	187 970	115 340
15.08.2013	15%	91 530	179 020	91 530	179 020	109 850
01.12.2012	10%	79 590	155 670	79 590	155 670	95 520
01.08.2012	15%	72 355	141 520	72 355	141 520	86 835
01.12.2011	10%	62 920	123 060	62 920	123 060	75 510
01.08.2011	15%	57 200	111 875	57 200	111 875	68 645
01.12.2010	10%	49 735	97 285	49 735	97 285	59 690
01.08.2010	20%	45 215	88 845	45 215	88 845	54 265
01.12.2009	12%	37 680	74 660	37 680	74 660	45 220
01.08.2009	25%	33 645	66 660	33 645	66 660	40 375
16.11.2008	12%	28 040	55 550	28 040	55 550	33 645
01.09.2008	20%	25 040	49 600	25 040	49 600	30 040
01.04.2008	12%	20 865	41 330	20 865	41 330	25 030
16.11.2007	20%	18 630	36 900	18 630	36 900	22 350
01.08.2007	25%	15 525	30 750	15 525	30 750	18 625
01.11.2006	20%	12 420	24 600	12 420	24 600	14 900
01.07.2006	20%	10 800	21 395	10 800	21 395	12 960
01.10.2005	20%	9 400	18 605	9 400	18 605	11 270
01.05.2005	20%	7 835	15 505	7 835	15 505	9 390
01.08.2004	30%	6 530	12 920	6 530	12 920	7 825
01.05.2003	20%	5 440	10 765	5 440	10 765	6 520
01.08.2002	15%	4 535	8 970	4 535	8 970	5 435
01.04.2002	15%	3 945	7 800	3 945	7 800	4 725
01.08.2001	40-45%	3 430	6 780	3 430	6 780	4 110
01.08.2000	50%	2 450	4 675	2 450	4 675	2 835

Table 2: Key indicators of population number in the Republic of Uzbekistan for 2003-2013

Years	Population y	Born x_1	Died x_2	Arrived x_3	Departed x_4	Labor resources x_5	Engaged in economy x_6
2003	25427900	508457	135933	139695	232707	9621200	9548900
2004	25707400	540381	130357	147398	243490	9897200	9712300
2005	26021300	533530	140585	144778	246386	10354600	10434500
2006	26312700	555946	139622	144038	209227	10812600	10336400
2007	26663800	608917	137430	151172	214310	11299200	10735400
2008	27072200	646096	138792	149732	195836	11603100	11035400
2009	27533400	651320	133610	138077	187710	11929500	11328100
2010	28001400	634810	138411	139775	183858	12286600	11628400
2011	29123400	622835	143253	136565	184149	12541500	11919100
2012	29555400	625106	145988	169701	210653	12850100	12223800
2013	29993500	679519	145672	155084	189650	13051200	12512200

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Table 3: Matrix of pair correlation coefficients factor and efficient features

	Y	X_1	X_2	X_3	X_4	X_5	X_6
Y	1						
X_1	0.81	1					
X_2	0.75	0.42	1				
X_3	0.41	0.25	0.49	1			
X_4	-0.71	-0.86	-0.36	0.11	1		
X_5	0.96	0.91	0.8	0,35	-0.82	1	
X_6	0.97	0.87	0.74	0.37	-0.76	0.98	1

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Activation of Innovative Activity Construction Organization

Ziyayev Muzaphar Kutlukovich,
Ph.D., Professor
Tashkent Architectural and
Construction Institute
Uzbekistan

Gimush Rifgat Idrisovich, Ph.D.,
Associate Professor
Tashkent Architectural and
Construction Institute
Uzbekistan

Davletov Islambek Halikovich, Ph.D.,
Associate Professor
Tashkent Architectural and
Construction Institute
Uzbekistan

Abstract

The paper discussed how to activate organization of innovative activity construction. The necessity and possibility of activating innovative processes in the construction industry, and it is, in our view can be achieved by the action of two factors: the identification of priority areas of innovation and enhancing innovation process. The implementation of innovations related to the change in the consumer products quality necessarily must be coordinated with marketing service company. Moreover, the relationship between marketing and innovation in the enterprise should be based on a parity basis. The existing methodology for determining the cost-effectiveness of innovations related to the use of new building materials do not provide sufficient objectivity.

Keywords :Construction, innovative activity, organization, Uzbekistan

1 Discussion

In the domestic construction for years of independence made significant reforms and the construction industry in Uzbekistan has reached significant results. However, the activities of this industry main causes some criticism.

One of the most important factors is the lack of effectiveness of construction. Lack of effectiveness of construction was evidence in:

- Organizational and technical backwardness of many companies in the industry, both in production and in management;
- Inertia contractors in relation to the use of innovation;
- Insufficiently rapid response construction companies to actually observed changes in the market.

At the enterprises of the construction industry low activity of innovation. The practice of developed countries such as the US, Japan, Germany and domestic achievements leads to the conclusion about the necessity and possibility of activating innovative processes in the construction industry, and it is, in our view can be achieved by the action of two factors: the identification of priority areas of innovation and enhancing innovation process.

Analyzing the state of the construction from the perspective of innovation, it should be noted that in the end, to this day on construction sites, a high proportion of manual labor, there is considerable downtime, quality of construction and its terms do not satisfy the requirements of consumers, no standards SHNK. Note that the increase in transportation costs due to the faster increase in energy prices a little oriented enterprises on the use of local raw materials, and including agricultural waste for the production of building materials and structures, to replace imported materials in Uzbekistan.

Assessing the priority and sequencing of innovation, based on the general trends of the current state of the construction industry, we can offer a sequence of innovations in contracting organizations [Gimush et al., 2011]:

1. The development of modern information and communication technologies in production

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management, which provides timely information, the reality of management, and, ultimately, reduce the cost of transport, a significant reduction in production downtime.

2. Formation in medium and large enterprises effective marketing services whose main function should be to study the trends in the market contracting and ensuring an adequate response. Note that in Uzbekistan as a whole have not found proper development of the so-called special construction system, when construction firm, acquiring relevant patents or to develop its own technology, often using a form of "know-how", raises a certain type of objects while achieving over through specialization significant effect. It is the search and promotion of such systems for the region with a predominant share of the rural population, may be subject to marketing activities of these structures.

3. Development of new technologies and materials for the construction of facilities. Here, in our view, given the growth of the transport component and distributed objects, which leads to the fact that up to 60% or more of the construction costs account for transport costs, it is necessary priority to be given to the use of local raw materials, including agricultural wastes that given enough low share of employment in the field provide a solution, and social problems. And it is necessary to take into account in this respect a lot of offers scientists the Tashkent architecture and construction institute (prof. Kasymov I.K., Ruziev K.I. and many others.) About the need for broad use in construction materials from local raw materials and waste products.

Based on the analysis of the innovation process and the possibility of participation of enterprises in this process, we propose to distinguish three types of enterprises according to their degree of participation in innovation [Gimush et al., 2011]:

- Type 1 - tentatively called passive, are part of the enterprise in the innovation process is to use ready-feasibility development;
- Type 2 - tentatively called as "active", is that the company is involved in research or development activities mainly through the funding of their own or provide a base for research and development activities;
- Type 3 - an interactive, which consists in the fact that the company itself or in cooperation carries out research and development work.

The qualitative difference between one species from another is that:

- The passive participation in the innovation process, the company is a consumer innovation;
- With the active and interactive participation of the company may be the owner of innovation and can profit not only due to the use of innovation within the enterprise, but also due to the implementation of licenses and patents to other companies.

It is obvious that the same company can, and sometimes forced to simultaneously use all three types. However, in my opinion, companies should be given preference for one particular species. The choice of the type of the enterprise's innovation process depends on several factors:

- Spheres and branches of the company;
- The financial capacity of the enterprise;
- The chosen development strategy.

Innovative management functions depending on the participation of the enterprise are as follows:

1. When passive participation
    - Continuous information retrieval finished development;
    - Evaluation of the acceptability of development and the conditions of its own production (market requirements, the availability and skills, technical capabilities, availability of raw materials, etc.);
    - Evaluating the effectiveness of development and formation of a portfolio of innovation;
    - Business plan development and implementation of specific measures taken to develop and shaping implementation schedule. It should be noted that the company is possible (and sometimes necessary) a comprehensive plan for innovation, both planned and current; Ensure effective implementation of innovation.
2. With the active participation in the innovation process
    - Identification among ongoing research promising developments relevant field of activity of the enterprise;
    - Evaluation of the expected effectiveness (held in conjunction with the research);
    - Identification of the financial capacity of the enterprise in terms of financing of the case study;
    - The conclusion of a contract research organization to conduct research;

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- Results of research and testing them;
- Practical application of research results in the enterprise and their implementation with a view to profit.

3. Interactive participation in the innovation process

   - Selection of promising lines of research;
   - Effective research; Approbation of research results;
   - Implementation of research results in the company and selling them to other businesses for more profits.

It should be noted that the intellectualization of production, increased dependence t of the achievements of scientific and technical progress raises the newest forms of participation of enterprises in the innovation process. The main motive for this is to get super-profits through the use of innovation. The complexity of the research, the need for high cost, and the availability of risk leads to the fact that even the largest corporations cooperate in order to conduct joint research or funding them.

It should be noted that the existing methodology for determining the cost-effectiveness of innovation (eg, "Guidelines for the evaluation of investment projects" [Kosov et al., 2000]) do not always provide a sufficient level of objectivity, for example, in assessing the innovation associated with the use of new building materials, and it requires a tailored approach industry [Tulaganov and et., 2014].

For the vast majority of construction industry, given their financial and economic condition, necessarily recommended to proceed without delay to the development in the early stages of the passive type of participation in the innovation process. The process of including them in the innovation process is as follows: initially, the development of domestic developments that do not require significant non-recurring costs for the purchase and use of innovation. Basically this development is focused on the use of local raw materials and waste production, more efficient use of traditional materials. Through the use of these developments the company by reducing production costs provide a satisfactory level of stability of the resulting economic indicators. In the second phase development of domestic developments that require significant initial investment. At this stage, a certain degree being updated production and ultimately a higher level of stabilization of the ultimate economic indicators. In the third stage: possible access to the use of foreign innovations. The third stage can be the basis for the transfer of the undertaking to another type of participation in the innovation process.

It should be noted that the implementation of innovations related to the change in the consumer products quality necessarily must be coordinated with marketing service company. Moreover, the relationship between marketing and innovation in the enterprise should be based on a parity basis. This is especially true of companies 2 and 3 types. In most cases, the marketing service should pose a problem for the implementation of the innovation enterprise.

In conclusion, it should be noted that the existing methodology for determining the cost-effectiveness of innovations related to the use of new building materials (eg, "Guidelines for the evaluation of investment projects" [Kosov et al., 2000]) do not provide sufficient objectivity.

2 Conclusion

The necessity and possibility of activating innovative processes in the construction industry, and it is, in our view can be achieved by the action of two factors: the identification of priority areas of innovation and enhancing innovation process. The implementation of innovations related to the change in the consumer products quality necessarily must be coordinated with marketing service company. Moreover, the relationship between marketing and innovation in the enterprise should be based on a parity basis. The existing methodology for determining the cost-effectiveness of innovations related to the use of new building materials do not provide sufficient objectivity.

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Influence of Human Capital on Economy

Sanjar O. Tairov
Senior Teacher
Tashkent Branch of Russian
Economic University after G.V.
Plekhanov,
Republic of Uzbekistan

Abstract

In the article issues of influence of human capital on national economy have been considered.

Keywords : social security, personnel development, human potential, duration of education, quality of labor.

At present programs of maintaining quality of labor force and training of specialists of management of XXI century have been realized practically in all developed countries. High qualification is a basis of social security and stability on labor market: such workers are mobile, quickly and independently become employed. Investments into human resources and personnel work become long-term factor of competitiveness and organization survival. In Japan personnel development is considered as a priority direction for solving problems of information-technical revolution and consequently enjoys state support in budgetary grants. Firms of Germany annually spend about 9 billion euro for increasing educational level and qualification of employees. Influence and economic gains of society from growth of human potential is in the following:

- in growth of gross domestic product and labor productivity. Foreign researchers counted up that growth of duration of education in the country for one year leads to the growth of gross domestic product of 5-15 %. In developing countries this indicator is still above; for the countries with low incomes it makes 23 %. According to Bureau of labor statistics of Ministry of Labor of USA, increase of average educational level of labor force promoted annual gain of labor productivity not less than 20 %;

- competitiveness of national economy defining development prospects of the country is closely connected with condition of human capital of society which is defined first of all by educational level of the population. Knowledge quickly becomes outdated and people who are capable to be retrained faster, master essentially new technologies. In the USA leading higher educational establishments intend to depart from subspecialty traditional for American higher educational establishments and concentrate on professional training of wide profile more;

- growth of educational level promotes unemployment decrease as education in a greater degree influences on cumulative earnings of a worker, than on the hour rate of its payment. With growth of education person spends more time on labor market, works more and thus, education growth reduces the rate of unemployment.

Analyzing, why the state incurs more and more essential part of expenses for education, it is impossible to be limited only by economic part of question. Growth of educational level of citizens brings considerable social benefits to the society, for example, unemployment decrease. More educated people become provided, increase in a layer of men of property, middle class, guarantees social stability to the society. Middle class is less susceptible to ideas of extremism and totalitarianism. At estimation of economic efficiency of investments into education it is necessary to consider that for society norm of discounting is lower, than for an individual as it is in a greater degree focused on achievement of long-term objectives. The analysis of international experience proves necessity of state support of intra-firm personnel training. Investments into human resources and personnel work become long-term factor of competitiveness and organization survival. On structural components of human capital it is possible to characterize both an individual, social group, and country as a whole.

Indicators, concerning material and spiritual par-

ties of development of individual or society, are also considered in unity. For estimating and comparing the level of economic and social situation of various countries there used index of development of human potential which is entered in international political and scientific practice of United Nations within limits of preparation of world reports on development of a person. Index of human potential development represents a summary indicator of development of human potential which characterizes the average level of achievements of the given country on three major aspects of development of human potential: long and healthy life measured by indicator of expected life expectancy at birth; knowledge defined by level of literacy of adult population (with weight coefficient 2/3) and cumulative total contingent of pupils of primary, secondary and higher institutions (with weight coefficient 1/3), and also worthy standard of living measured by indicator of gross domestic product per capita.

As labor potential of society is increasing at the expense of reducing disease and traumatism that leads to increase in number of labor and expansion of scales of labor activity. Improvement of population health is considered as an important factor of physical development, increase of working capacity and accordingly expansion of possibilities for creating products and services, accumulation of knowledge and so forth educational level. Increase in education level of both individual and population as a whole essentially influences on quality of human capital - major factor of augmentation of riches of the society - and stipulates growth of public labor productivity. Thus, index of human potential development takes into account a majority of components of human capital and adequately enough characterizes the sum of human capital saved up by a certain state. At calculation of index of expected life expectancy limiting values are from the age of 25 to 85; they are equal to 0 % and 100 % in indices of literacy of adult population and cumulative total contingent of pupils; in gross domestic product index per capita - $100 and 40 000. The index of human potential development is defined as an arithmetic mean of indexes on aspects. This indicator is taken by United Nations as a basis of comparative rating estimations of various countries on development of human potential.

Human capital is inseparable from a human as his carrier, therefore preservation and effective utilization of human capital is predetermined by biosocial essence of a person. Therefore developing and strengthening not only medical, but probably preventive medicine, strengthening of enlightenment and educational activity on confirming values of human life and strengthening of physical, psychological and social health of population, increasing efficiency of sports and fitness work are of particular importance with the view of its physical perfection. Thus, at postindustrial stage of development of the society with socially focused market economy productive forces of a person are realized in the form of human capital generated in the form of investments and certain health stock accumulated by human, scientific and educational knowledge and motivations which lead to the growth of qualification of the worker, expediently used in this or that sphere of public reproduction, promoted the growth of productivity and quality of his work and thereby lead to the growth of earnings of the person.

Human capital becomes major factor of economic growth. According to some estimations, in developed countries an increase in duration of education for a year leads to increase in gross domestic product of 5-15 %. Thus, policy in the sphere of science and innovations will be one of priorities.

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Roles of Human Resources And Information Technology As Moderator Variables On The Relationship Between Insurance Industry And Economic Growth

Hendrisman Rahim
Doctoral Degree in Economics –
Gunadarma University
hendrisman@jiwasraya.co.id

Abstract

The relationships between insurance sector and economic growth amongcountries are different, they can becausality or two-way, one-way, or no relationship. This article presents a preliminary study on the causal model between insurance sector and economic growth by including two other factors, namely Human Capital Index and Information Technology which measured by Networked Readiness Index. This preliminary study used discriminant analysis and Moderated Regression Analysis by using data from 88 countries in 2014. The results of discriminant analysis showthat insurance penetration, insurance density, human capital index, and networked readiness index can predict the country's income level with prediction level of 88.3 percent. Insurance penetration shows distinguishing characteristic lower than networked readiness index and human capital. The results of regression analysis with two moderators show that insurance sector has no significant effect on economic growth, but its interaction with networked readiness index and human capital index shows a significant effect. General insurance sector that has significant effect on economic growth only shows significant interaction with human capital index.

Keywords :insurance penetration, insurance density, human capital index, networked readiness index

1 Introduction

The report from Sigma regarding World Insurance Statistics released in 2013 stated that Indonesia was a country showing a rapid development seen from the indicators of insurance penetration and density. The role of insurance industry at the international level could be seen from premium growth. In 2013 the total value of world premium was USD 4,640,941 million consisting of life insurance premium of USD 2,608,091 million and general insurance premium amounted to USD 2,032,850 million. By using nominal values, premiums in 2013 decreased, but when adjusted with the rate of inflation, the total world premiums showed a total growth of 1.4%, 0.7% for life insurance premium and 2.3% for general insurance.

ASEAN region has grown relatively higher than the world average, that was 9.5% of total premiums, 10.1% for life insurance premium, and 8.1% for general insurance. However, insurance penetration and density of Indonesia were still below the world average, Asia, and ASEAN, and insurance penetration of Indonesia was 2.1 percent for the total premium, while the world average, Asia, and ASEAN were respectively 6.28%, 5.37% and 3.35%. Per capita premiums of Indonesia were USD 77 for the total premium, USD 59 for life insurance, and USD 18 for general insurance, or still below the world average. The conditions show that the income allocation to buy insurance was still low.

Theoretically, the relationship between insurance development and economic growth can be a causal relationship,and the research question is "which one is more powerful as a major contributor?" or in other words, "which one is at the cause and effect positions, does economic growth support insurance growth or insurance growth support economic growth?" Curak et al. ([Curak et al., 2009]) empirically examined the relationship between the development of insurance sector and economic growth by using the 10-members of European Union in the period 1992 to 2007. The research showed that the development of insurance sector had positive and significant effects on economic growth, for overall insurances, life insurance and general insurance.

According to Su, Chang and Pan ([Su and Pan, 2013]), the relationship between life insurance development and economic growth can be significantly influenced by special factors in every country in Middle East countries. Life insurance and macroeconomic indicators show a

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two-way relationship in high-income countries, and general insurance can support economic growth in countries with low incomes. Ward and Zurbruegg ([Ward and Zurbruegg, 2000]) research on longitudinal data from nine countries becoming members of the Organization for Economic Cooperation and Development (OECD) indicate that there are some countries showing that the insurance industry makes a positive contribution to the economic development of the country. However, in some other countries, on the contrary, economic growth contributes to the growth of insurance industry in the country. The final conclusion is that the relationship is very specific to each country so that the insurance industry's contribution on the economy development is still very dependent on other factors, and in this study it is considered factors of human resources and information and communication technology.

Information society is formed by the major advances in the field of Internet technology. Demands for information openness and transparency have increased, including the financial information of a company. According to Oyelere et al. ([Oyelere et al., 2000]), the development of the Internet as a medium of information dissemination of financial statements has created a new reporting environment. The environmental changes require the attention from the company to be used for the benefit of the company. Davey and Homkajohn ([Davey and Homkajohn, 2004]) state that the dynamics of the business world lead to paper-based reports which are less timely and less useful for decision makers. The internet is becoming one of the most frequent sources of information used by the users ([Khan and Ismail, 2012]). Dasgupta and Sengupta ([Dasgupta and Sengupta, 2002]) state that with the advancement of internet technology, the online process replaces conventional model in today's society.

A study on information and communication technology from a macroeconomic perspective, together with human capital, has been carried out by Papageorgiou ([Papageorgiou, 2000]) associated with the model or theory of growth determined by a combination of human capital and technology adoption. The model consists of two parts: a model for countries whose technology have been developed and a model for developing countries. The models predict that developing countries have the opportunity to achieve high growth through the adoption of technology if the technology gap is relatively close to technology frontier. Meanwhile, for the countries relatively far to the technology frontier, the model predictions are more pessimistic than the neo-classical growth theory.

This article presents the results of research on the relationship between insurance sector and economic growth, as well as the role of human resources factor and information technology in strengthening the relationship between insurance sector and economic growth. The objectives of the research are as follows: (1) To determine the grouping pattern of countries in the world based on insurance penetration, insurance density, human capital, and information technology; (2) To know the prediction level of insurance penetration, insurance density, human capital, and information technology on the income level of countries in the world; and (3) To test the model of relationship between insurance sector and economic growth by incorporating human capital and information technology variables moderating the relationship.

2 Literature Review

2.1 Relationship Between Insurance Sector and Economic Growth

In 1911 Joseph Shumpeter argued that services provided by financial intermediaries were important for economic development ([Outreville, 1999]). Ege and Sarac ([Ege and Sarac, 2011]) stated that financial system was an essential element for the growth process because the financial system had the function of providing funds for the procurement of technology widely and capital accumulation. Insurance development, which is an important part of the financial system, is expected to contribute to financial development and economic growth.

Ward and Zurbruegg ([Ward and Zurbruegg, 2000]) showed no long-term relationship between the growth of insurance industry and economic growth in some countries becoming members of OECD (Organization for Economic Cooperation and Development), including UK and US, using a total value of insurance premium. Meanwhile, according to Outreville ([Outreville, 1999]), the results of an empirical analysis of the data at the level of companies, industries, countries, and comparisons between countries showed a strong positive relationship between the functions of financial system and economic growth in the long term.

Research on the relationship between the development of insurance industry and economic growth involves a number of other variables, in particular macro-economic variable as studied by Curak, Loncar, and Poposki ([Curak et al., 2009]), Kugler and Ofoghi ([Kugler and Ofoghi, 2005]), Outreville ([Outreville, 1999]), and Ege and Sarac ([Ege and Sarac, 2011]). The number of samples, variables, statistical methods, and the results of previous studies in general are presented in the following table 1.

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Table 1: Results of research on insurance sector and economic growth

No	Writers	Contexts	Variables	Statistical Methods	Results
1	Jahromi and Goudarzi (2014)	Iran with the data of 1981-2011	GDP, inflation, per capita income, insurance penetration	Cointegration and Granger causality test	Macroeconomic variable and insurance penetration show cointegration in the short term, per capita income and insurance penetration shows a two-ways relationship. Insurance penetration has a unidirectional relationship to GDP.
2	Sibindi and Godi (2014)	South Africa with the data of 1990-2012	Insurance density and GDP per capita	Cointegration Test and Granger Causality Test	Causal relationship from economic growth to long term insurance and from economy to total insurance sector.
3	Su, Chang and Pan (2013)	7 countries in the middle east with the data of 1995 to 2010.	Insurance density and changes in GDP per capita.	Panel data causality test with Asymptotic and Panel Bootstrap Distributions	Life insurance and macroeconomic indicator have two-ways relationship in higher-income countries, while general insurance is more supportive on economic growth in lower income countries
4	Richard and Victor (2013)	Nigeria with the data of 1980-2011.	Insurance premium capital, insurance company investment, insurance sector development, GDP	Cointegration Test and Error Correction Model	Insurance premium capital has significant impact on economic growth, and there is a causal relationship between insurance sector development and economic growth.
5	Verma and Bala (2013)	India with the data of 1990-2011	Life insurance premium, life insurance investment, GDP	Regression Analysis of Ordinary Least Square (OLS)	Life insurance has significant effect on economic growth
6	Ege and Sarac (2011)	29 countries in the period 1999 to 2008	GDP, growth rate of labor force, rate of increase in insurance premium, openness ratio namely amount of exports and imports divided by GDP, share of fixed capital investment on GDP.	Econometric analysis with panel data	Insurance sector and economic growth have positive relationship

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7	Curak, Loncar, and Poposki (2009)	10 European countries with the data of 1992-2007.	GDP growth, GDP per capita, life insurance, general insurance, total insurance, personal loans, stocks capitalization, investment, openness, education, inflation	Model of fixed effect panel and control variable for relevant determinants of economic growth and endogeneity.	Insurance sector development has positive and significant effect on economic growth, whether they are total insurance, life insurance, and general insurance.
8	Kugler and Ofoghi (2005)	Data period of 1971 to 2003 for general insurance. For long-term insurance premium of 1966-2003 was based on social and economic data from the World Bank.	GDP, annual insurance premium, single premium insurance, motor insurance premium, health and accident insurance premium, property insurance premium, liability insurance premium, financial loss insurance premium, reinsurance premium, and sea and air transport insurance premium.	Autoregressive polynomial model (ARIMA), cointegration test, and causality test.	Relationship between insurance market size and economic growth is more on long-term than cyclical relationship

Table 2: Research Results on IT, Human Resources, and Economic Growth

No	Writers	Context	Variables	Methods	Results
1	Mehrara et.al. (2015)	Countries in the Middle East with the data of 1990-2010	ICT, Foreign Direct Investment (FDI), GDP	Cointegration test and Ordinary Least Square.	ICT has positive and significant effect on economic growth and effect is bigger on developing countries
2	Yousefi (2015)	70 developed and developing countries with the data of 2003-2008.	ICT expenditure and growth rate of GDP per capita	Cross-country time-series Analysis with Granger causality test for panel data	Causal relationship and direction vary among countries groups based on income level. ICT investments lead to per capita growth rate in the group of high-income countries. In the group of middle income (upper-middle and lower-middle) countries, the causal relationship has different directions.
3	Wilson et.al (2014)	6 countries in Africa with the data from 2000 to 2011	Mobile teledensity and fixed line teledensity and GDP	Granger causality test	No causal relationship between ICT teledensity (mobile and fixed telephone) and economic growth.

4	Campisi et al. (2013)	20 OECD countries and 24 non-OECD countries with the data of 2007	GDP, labor, capital stock and human capital, Foreign Direct Investment, and ICT Development Index	Data Envelope Analysis (DEA) and Classification and Regression Tree (CART)	Level and quality of access to information technology infrastructure has an important role in determining the level of technical efficiency
5	Mehmood and Azim (2013)	24 Asian countries (including Indonesia), data of 2001-2010	GDP per capita, labor force, Human Development Index, population, and ICT indicators (fixed telephone, mobile phone, broadband, internet, internet user, ICT maturity index), education and ICT imports.	Regression equation with Systems Generalized Method of Moment (SGMM) for panel data	ICT tends to participate in the process of economic convergence. Demographic, human development, and electricity consumption factors contribute to economic convergence
6	Adefeso (2011)	Nigeria with the data of 1970-2008	ICT capital and GDP	Cointegration test and Ordinary Least Square regression	ICT provide productive contribution on economic activities
7	Dedrick, Kraemer, and Shih (2011)	41 developed and developing countries with the data of 1985-2007	IT investment, GDP, labor productivity, and complementary factors including human capital and openness (sub-sample), developed and developing countries (sub-sample)	General Least Square (GLS)	Developing countries have achieved significant productivity profit from information technology investment in the latest period

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2.2 Relationship among ICT, Human Resources and Economic Growth

OECD (Organization for Economic and Cooperation Development) defines Information and Communication Technology, hereinafter called as ICT, as a series of activities facilitated by electronic equipment that includes processing, transmission and presentation of information. ICT is a convergence of three areas, namely information technology, data and information, as well as socioeconomic issues. One of the key aspects of the transformation is ICT. The rapid development of ICT and how the technology is eventually used by households, companies and governments at the local, regional, national, and international have caused real revolution ([Cortés and Navarro, 2011]). Some indicators related to ICT are very appropriate for evaluating the contribution of ICT on economic and social development, especially in developing countries ([Kivunike et al., 2013]).

Comin and Hobijn research ([Comin and Hobijn, 2003]) in 23 countries for the period 1988-2001 stated that theformof technology showed a positive correlation between rate of technology adoption and GDP per capita, including the impact of the use of personal computers. Beilock and Dimitrova (2003) investigated the relationship between the number of Internet users per 10,000 inhabitants and GDP per capita, infrastructure and non-economic factors. The research results showed that GDP per capita was the most important determinant on the number of Internet users.

Kuppusamy, Raman, and Lee ([Kuppusamy et al., 2009]) described various theories or models explaining the impacts of ICT on economic growth. In summary, the relationship between ICT and developed countries was studied using Cobb-Douglas production function. The model was used to estimate the contribution of ICT investment on economic growth. However, empirically the patterns were diverse. The differences in general indicate that ICT is not the only factor-or should be concurrent with other factors such as human resources and organization innovation-in influencing macro economy. Several studies that examined the relationship between information and communication technology and economic growth can be seen in the table 2.

3 Research Methodology

The observation units used in this study were countries included in the reports of some international organizations in accordance with the indicators or parameters analyzed by each organization. The number of the countries were 88 countries included in the reports: "World Insurance" published by Swiss Re-SIGMA, 124 countries in "The Human Capital Report" published by World Economic Forum, and 148 countries in "Global Information Technology Report" published regularly by the World Economic Forum. The data obtained from the first report were total insurance premium, insurance density and insurance penetration, for both life insurance and general insurance. Human capital report from WEF was used for the value of Human Capital Index (HCI) for each country. Networked Readiness Index (NRI) was obtained from "Global Information Technology Report".

This study examined the effect of Human Capital Index and Networked Readiness Index moderator variables on the relationship between insurance industry and economic growth. This model used the data in 2014. The research model can be seen in the figure 1.

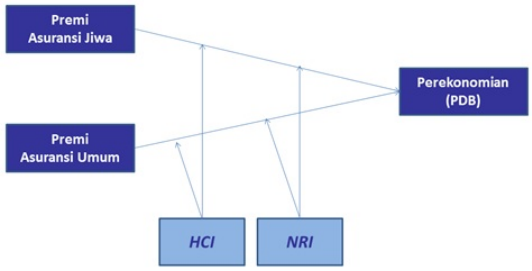

Figure 1: The research model with two moderator variables

The research model above was tested using Moderated Regression Analysis (MRA) technique with cross-sectional data in 2014. The regression equation model is as follows:

$$GDP = a + bLP + cNLP + dLPxHCI+$$

$$eLPxNRI + fNLPxHCI + gNLPxNRI + h$$

GDP is gross domestic product, LP is life insurance premium, NLP is general insurance premium, HCI is human capital index, and NRI is the networked readiness index. LPxHCI is the interaction between life insurance premium and a human capital index, LPxNRI is the interaction between life insurance premium and networked readiness index, NLPxHCI is the interaction between general insurance premium and human capital index, and NLPxNRI is the interaction between general insurance premium and networked readiness index. Before presenting the calculation results with MRA, this article presents the results of discriminant analysis used to look at the prediction level of predictor variables on the level of income of countries in the world. The predictors used are life insurance penetration, general insurance penetration, human

capital index, and index of networked development index.

4 Result and Discussion

4.1 The position of Indonesia in the Global Environment

4.1.1 Insurance Premium

The amount of premiums collected by insurance companies in Indonesia was IDR. 181.38 trillion (USD 15.3 billion), consisting of life insurance premium amounted to IDR120.38 trillion (USD 10.16 billion) and general insurance premium amounted to IDR61 trillion (USD 5.14 billion). Countries with the highest total premiums in the world were United States with the premium value of USD 1280.44 billion, followed by Japan by USD 479.76 billion and UK amounted to USD 351.37 billion. Indonesia ranked 36th for total premiums, 31 for life insurance, and 41 for general insurance from 88 countries. Indonesia's rank decreased dramatically when using indicators of insurance density and insurance penetration, ranking 74based on insurance density and 68 based on insurance concentration. Indonesian insurance density was USD 60 per capita consisting of USD 40 per capita for life insurance and USD 20 for general insurance. Indonesian insurance concentration value was 1.7% (on GDP) consisting of 1.1% for life insurance and 0.6% for general insurance. The comparison of mean of insurance premium based on country income level can be seen in the figure below, and Indonesia is among countries with lower-middle income.

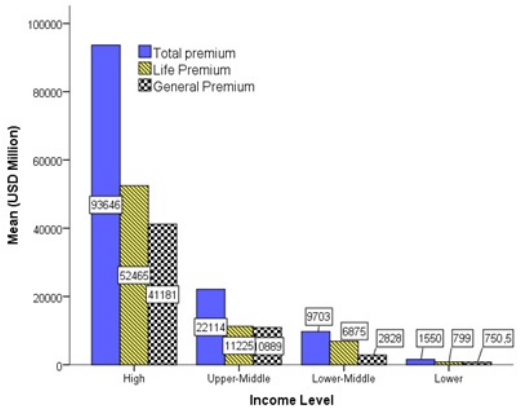

Figure 2: Insurance premium and income level

4.1.2 Networked Readiness Index

Singapore became the country with the best rank in the world based on the value of NRI, followed by Finland, Sweden, the Netherlands, and Norway in the top five of the world. Indonesia ranked 79 out of 143 countries with NRI value of 3.9 with a general overview of the value for the 12 indicatorsthat can be seen in the image below. Indonesia still ranked below Singapore (rank 1), Malaysia (32), Thailand (67), and the Philippines (76).

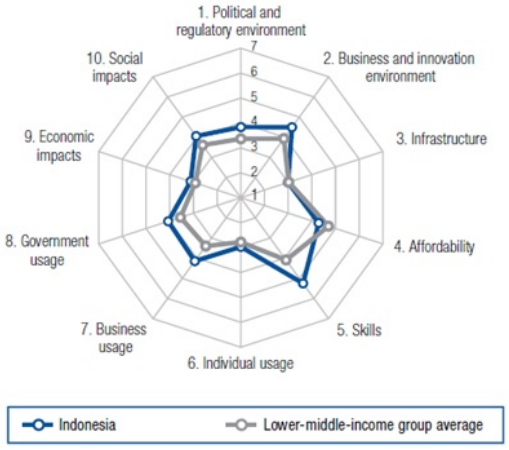

Figure 3: Value of Indonesian networked readiness index (Source: World Economic Forum, 2015)

4.1.3 Human Capital Index

Five countries ranked top five in the world by human capital index values were Finland, Norway, Switzerland, Canada, and Japan. Indonesia ranked 69 of 124 countries with the human capital index value of 66.99. Indonesia rank was still below 5 countries in the ASEAN region, namely Singapore (rank 24), Philippines (46), Malaysia (52), Thailand (57), and Vietnam (59). Human capital indexes for Indonesia decreased when viewed from the age group, they were rank 47 for the age group under 15 years old, rank 65 in the age group 15 to 24 years old, rank 70 for the age group 25 to 54 years old, rank 74 for the age group 55 to 64 years old, and rank 92 for the age group 65 years old above.

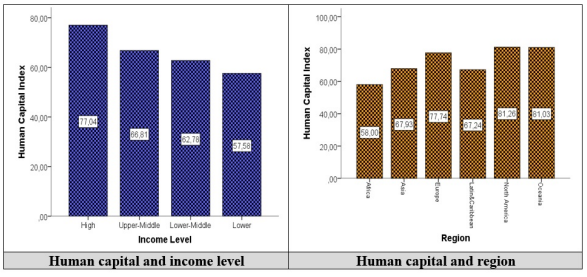

Figure 4: Insurance premium with income level and region

4.2 Results of Discriminant Analysis

Discriminant analysis was used to look at the level of country groupings predictions based on income

Table 3: Classification is based on discriminant analysis

		Income group	Predicted Group Membership		Total
			High Income	Middle Income	
Original	Count	High Income	34	6	40
		Middle Income	3	34	37
	%	High Income	85.0	15.0	100.0
		Middle Income	8.1	91.9	100.0

Table 4: Results of regression coefficients for each research variable

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	62.678	41.322		1.517	.134
	Life Premium	-.012	.019	-.429	-.643	.522
	General Premium	.249	.028	9.467	9.036	.000
	NRI_LIFE	-.006	.002	-1.157	-2.831	.006
	HCI_LIFE	.001	.000	1.752	2.226	.029
	HCI_GENERAL	-.003	.000	-8.655	-8.270	.000
a. Dependent Variable: Gross Domestic Product						

level by using four predictor variables, namely life insurance penetration, general insurance penetration, human capital index, and networked readiness index. Insurance penetration shows that distinguishing characteristics lower than networked readiness index and human capital. The distinguishing characteristics ordersfrom the highest to the lowest are networked development index, human capital, general insurance penetration and life insurance penetration. The prediction level based on four predictors is relatively high, that is 88.3 per cent. The complete classification results can be seen in the table 3.

4.3 Roles of Human Resources and Information Technology as Moderator

The role of human resources and information technology as a moderator in the relationship between insurance sector and economic growth is tested by Moderated Regression Analysis. The regression equation uses two predictor variables, namely life insurance premium and general insurance premium as well as two moderator variables namely human capital index and networked readiness index. The results of regression analysis show that these variables have very significant effect on economic growth with a correlation coefficient of 0.990. Independently, life insurance premium has no significant effect on economic growth, but its interaction with human capital index and networked readiness index shows a significant effect. For general insurance sector, insurance premium and its interaction with human capital index shows a significant effect, but the interaction with networked readiness index does not enter into the regression equation model. The results of test partially can be seen in the table 4.

The interpretation of this test is that human resources factor and information technology have a very big role in strengthening the relationship between insurance sector and economic growth. Human capital index is a significant moderator for life insurance sector and general insurance sector, while networked readiness index only shows significant interaction with life insurance sector. It shows that the role of information technology is relatively greater in life insurance sector.

5 Conclusion and Recommendation

5.1 Conclusion

Indonesian insurance industry is still left behind in the global environment as indicated by the insurance penetration and insurance density which are below the world average. The quality of human resources and the level of mastery of information technology in Indonesia also show relatively same position that is still left behind developed countries or countries with high income. The results of preliminary research in general show that there is a pattern of relationship among insurance sector, human resources, and information technology with economic growth. These three factors are significant predictor son the country's income level grouped into two levels, namely countries with high income and countries with middle-income. The distinguishing characteristic of insurance penetration is still lower than human resources and information technology. The results of discriminant analysis indicate that human resources quality and

mastery of information technology are still more dominant factors in determining country's income level than insurance sector.

The relationship between insurance sector and economic growth is getting stronger if it is moderated by human resources quality and mastery of information technology. The analysis results show the important roles of human resources and information technology as contributing factors in the increase ofinsurance sector role in economic growth. The quality of human resources shows a strong role for both insurance sectors, namely life insurance and general insurance, while the mastery of information technology shows a higher interaction on life insurance sector. The role differences require further investigation, particularly regarding the implementation of e-insurance in life insurance sector and general insurance sector.

5.2 Recommendation and Proposed Further Research

The insurance industry in Indonesia needs to give greater attention on the improvement of insurance human resource quality and mastery of information technology, in addition to public education to increase the public awareness or insurance literacy. Insurance awareness is an initial potential in an effort to increase insurance penetration in Indonesia. One solution is a program to improve professionalism through expertise certification carried out by professional associations or relevant other stakeholders, especially the role of regulator. Another implication of this research results is the development and implementation of e-insurance that can improve the quality of insurance services to the communities, supported by information technology governance as one part of good corporate governance.

Further research will be focused on panel data analysis combining cross-sectional analysis and time series data. The panel data analysis is required to test causal model between insurance sector and economic growth. The causal relationship can be two-way, one-way, or there is no relationship between the two. Analysis of Indonesia's position in the global environment can be also studied in depth by cluster analysis that can show competitive position of insurance industry of Indonesia in the global environment. The analysis is required in the preparation of regulations or blueprint for the development of insurance industry that can encourage insurance industry preparedness in Indonesia in the era of financial globalization and information age.

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The Role of Flexibility Manufacturing System Viareal Option The Market: A Review

Azamat Rajapov
School of Transportation and Logistics, Southwest Jiaotong University, Chengdu 610031, China
azamatrajapov@mail.ru

Alisher Khamdamov
School of Transportation and Logistics, Southwest Jiaotong University, Chengdu 610031, China
alisher_bmw@mail.ru

Saidjahon Hayrutdinov
School of Transportation and Logistics, Southwest Jiaotong University, Chengdu 610031, China
SAIDJAHON83@mail.ru

Sanjar Rajapov
of Information Science and Technology, Southwest Jiaotong University, Chengdu, 610031, China
rajapovsanjar@gmail.com

Abstract

In our globalization era economic situations are increasingly intense to majorities of manufacturing companiesneed to consider with manufacturing flexibility via real option. In this paper we illustrated different types of option pricing papers and real option papers related to flexibility manufacturing in order to present which types are considered and which way to use. Furthermore, we also show real option papers to flexibility manufacturing system types according to the Sethi and Sethi's framework. Also, in this article we conclude with advises for some possible future research directions.
Keywords : Manufacturing flexibility; Manufacturing flexibility system; Real options; discrete parts manufacturing; Sethi and Sethi's framework

1 Introduction

Jens Bengsston [Bengtsson, 2001] presented in his research work that flexibility manufacturing system and real options from industrial engineering/production management perspective. He says that flexibility types not considered via real option and also real option without any responsibility flexibility manufacturing types are discussed andidentified. Since Black and Scholes [F. Black, 1973] and Merton [Merton, 1973] presented their research work on option pricing theory many application areas, e.g. valuing complex security of financial and valuing companies, have been found.Capital budgeting is another part which theory of option pricing has become much and much used, at least by many academics. Many authors see e.g. Trigeorgis [Trigeorgis, 1996], have used this theory of option pricing to deal with special features and dilemmas associated with valuation of project contains flexibility which have resulted in a numberof many papers concerning valuation of so-called realoption. In this paper we will examine some of literature related to theory of option pricing applied on valuation of flexible manufacturing, also real options manufacturing. We will review some of related papers to manufacturing flexibility from industrial engineering or production management perspective. Such as, Sethi and Sethi's [A.K. Sethi, 1990] survey on flexibility manufacturing system is used.Sethi and Sethiproceed from Brown et al. [J. Browne, 1984] however a number of manufacturing flexibility types are added and the viewed of Sethiand Sethivery occasionallydeviates from that of Browne et al. Gupta and Goyal [Y.P. Gupta, 1989] claim that the definitions of flexibility in Browne et al. are the most comprehensive and use their framework in a survey to classify the literature on manufacturing flexibility. Olhager and West [J. Olhager, 1999] referto Sethi and Sethi as a literature review on manufacturing flexibility, which covers and systematize the flexibility types linked to flexible manufacturing systems. Thus, the Sethi and Sethi framework based on Browne et al. should be appropriate as a point of departure for a review onand classification of manufacturing flexibility and real options.

2 Pricing theory

2.1 Introduction to Option Pricing Theory

When we talk about option pricing majorities know that, the most commonly used models today are the Black-Scholes [F. Black, 1973] model. Theoretically, their value of pricing options have margins error from other assets, because, the price of a company's common shares.Time also plays a large role in option pricing theory, because calculations involve time periods of several years and more. What options are granted to employees of the company have been exported, compared to non-trade requires a different valuation methods. A financial market is a mathematical modelwas the Black-Scholes formula derived. In 1973 the formula was introduced by three economists led to fast growth in options trading. This formula is used in almostall global hedging markets by sole traders and buyers to determine price of European option, a type of financial security. These type of European options can only be exercised at expiration. The formula has been demonstrated to yield prices very approachable to the discovered market prices. The aims of this part is to present introduction to the foundation of option pricing and some option related concepts that are of importance to the following text. A more thorough introduction can be found in J.C.Hull [Hull, 2000].The value of call option, and value of put option, at the data of exercise are written as function of the exercise price, K, and value of the underlining asset by time, Stand expressed as in expression (1) and (2).

For a call :

$$max(S_t - K, 0) \tag{1}$$

For a put :

$$max(K - S_t, 0) \tag{2}$$

Where:
S_t-is the price of the underlying at time t
K-is strike price

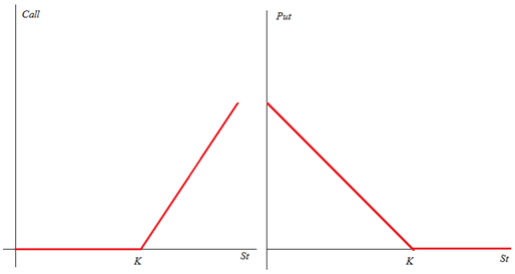

Figure 1: Payoff from a call and a put option.

The model of stock price behavior used by Black-Scholes [F. Black, 1973] and Merton [Merton, 1973]. That means the percentage (%) changes is distributed in the stock price in a short time. Define: :

μ: Expected return on stock :
σ : Volatility of the stock price

The mean of return in the time Δt is $\mu\Delta t$ and the standard deviation of the return is $\sigma\sqrt{\Delta t}$, so that,

$$\frac{\Delta S}{S} \square \phi(\mu\Delta t, \sigma^2\Delta t) \tag{3}$$

Where the change in stock is price in time , and a normal distribution with mean mand variance.

$$\ln S_T - \ln S_0 \square \phi\left[\mu - \frac{\sigma^2}{2}\right]T, \sigma^2 T \tag{4}$$

it follows that

$$\ln \frac{S_T}{S_0} \square \phi\left[\mu - \frac{\sigma^2}{2}\right]T, \sigma^2 T \tag{5}$$

and

$$\ln S_T \square \phi\left[\ln S_0 + \left(\mu - \frac{\sigma^2}{2}\right)T, \sigma^2 T\right] \tag{6}$$

Where S_T the stock price is at a time T and is S_0 the stock price at the time = 0. Equation (6) shows that $\ln S_T$ normally distributed, so that S_T has a lognormal distribution. The mean of $\ln S_T$ is $\ln S_0 + \left[\mu - \frac{\sigma^2}{2}\right]T$ and the standard deviation equals to $\sqrt{T}$.

2.2 Real Option Introductions

Our Merton and Black, Scholes and shows their research work, option pricing theory found brand new directions of applications. Differ from financial pricing options theory is appropriate to options establishedthrough real opportunities. In this research flexibility manufacturing system is considered and flexibility claims, only has chancehowever, no obligations. By that means, flexibility can be clarified as different types of options, apart from the pay offs in case of real options and flexibility, is more difficult than the payoff from put options and call option. In whatever way, in many cases, put and call options can be combined to present required payoff [Bengtsson, 2001]. The traditional approach valuing a potential capital investment as is known as the "net present value" (NPV) approach.The NPV of a project is the present value of its expected future incremental cash flow. Discount quantity used to determine present value is a "risk-adjusted" discount rate, chosen to reflect the risk of the project. Riskiness of project increases, discount is also increases.

Short example: company invest cost is $200 million last 4 years, the expected cash flow per year $50 million, if risk adjusted discount rate 12%, then NPV of investment is:

$-200 + 50e^{-0.12x1} + 50e^{-0.12x2} + 50e^{-0.12x3} + 50e^{-0.12x4} = -50.4$

If NPV is negative, as we just calculated means that project will reduce the value of company its shareholders and should not be undertaken.

If NPV is positive would indicated that the project should be undertaken because it will increase shareholders wealth.

Commonly using involves the capital asset pricing models steps as follows:

- Take the sample of companies main line of business is the same as that of the project being contemplated
- Calculate the bates of the companies and average them to obtain a proxy beta for the project
- Set the required rate of return equals to the risk-free rate plus the proxy beta times excess return of the market portfolio over risk-free rate

One problem with traditional NPV approach is that many projects contain embedded options.

3 Flexibility and Real Options

3.1 Components Flexibility Via Real Options

According to the Sethi and Sethi's [A.K. Sethi, 1990] framework, here, we carefully define several different kinds of flexibilities that are reported.These are machine, material handling, operation flexibilities. Sethi define these as follows:

- *Machine flexibility* (of a machine) refers to the various types of operations that the machine can perform without requiring a prohibitive effort in switching from one operation to another. In assembly systems, the term machine refers usually to an assembly robot. Types of operations that we have in mind are drilling holes up to ¼ diameter, grinding case-hardened steel to specified tolerances, assembling parts of certain shapes and sizes, etc. Note that we allow these operations to include the specification of the input material, such as its hardness or ductility. With regards to the prohibitive effort, it is usually expressed in terms of time and cost. It would certainly rule out redesigning the machine completely. On the other hand, it might not exclude changing the tools in the tool magazine. The motivation for our definition lies in how useful the definition is in assessing the contribution of the given machine toward the manufacturing flexibility of a system, not yet fully specified and subject to major changes in the long run, of which the machine will become an element. Such an assessment may enable us, for example, to make an informed decision to buy or not to buy the machine
- *Flexibility of a material handling* system is its ability to move different part types efficiently for proper positioning and processing through the manufacturing facility it serves. The definition covers loading and unloading of parts, transporting them from machine to machine, and eventually storing them under varying conditions of the manufacturing facility. define the ability of the material handling system in terms of physical location of each group of machines, the linkages between each pair of groups and between each pair of machines within each group, and the times for every possible move between machines. From these it is possible to define the set of all possible material paths that can be supported in the factory. Peter emphasizes buffer sizes, the ability to accommodate different parts of different shapes and sizes, and the readjustment of paths in case of expansion. The definition also subsumes the pallet fixture flexibility defined by Newman. This flexibility determines the degree of freedom available to part loading schedules.
- *Operation flexibility* of a part refers to its ability to be produced in different ways. Operation flexibility is a property of the part, and means that the part can be produced with alternate process plans, where a process plan means a sequence of operations required to produce the part. An alternative process plan may be obtained by either an interchange or a substitution of certain operations by others. Thus, a part that permits operations to be performed in alternate orders or using different operations (i.e., slurry versus wire brush deburr) in an interchangeable fashion would possess operation flexibility. A process will be considered to have operation flexibility if parts that are being produced in the system possess operation flexibility and if the material handling system is able to deliver parts to machines in different possible orders. The definition of the operation flexibility of a process is consistent with Browne et al. (1984), Maier (1982), and Chatterjee et al. (1987).

The model Kulatilaka [Kulatilaka, 1995] present that the value of flexibility within a stochastic dynamic model. Monahan and Smunt [1984] took a similar approach in their study of the flexibility manufacturing system investment decision. They develop a discrete time stochastic dynamic programming model where interest rates and "levels of technology" are assumed to be exogenous and evolving stochastically over time. The proportion of production using flexibility manufacturing system is then chosen so that discounted costs are minimized.

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3.2 System Level of Flexibility Via Real Options

Sethi and Sethi's [A.K. Sethi, 1990] difine 5 flexibility types at this system level, such as: product, process, volume, routing, and expansion flexibility.

- *Product flexibility* is the ease with which new parts can be added or substituted for existing parts. In other words, product flexibility is the ease with which the part mix currently being produced can be changed inexpensively and rapidly. It should be kept in mind that the addition of new parts will invariably involve some setup. This distinguishes product flexibility from process flexibility. What is required for product flexibility is that the setup does not involve inordinate amounts of time and cost. We should also emphasize that the new parts in the definition above cannot be arbitrary; for further clarification, on production flexibility. It is important to note that in Lim's (1987) survey of FMSs in the United Kingdom, 11 out of 12 reporting companies considered flexibility in manufacturing to mean product flexibility.

In Stulz [Stulz, 1982] calculated analytical formulas the European option on the maximum of two risky assets with fixed exercise price is evaluated. Johnson [B. Kamrad, 1995] extend Stulz to include several risky assets, i.e. there are several mutually exclusive products that can be produced. Triantis [Andreou, 1990] develop two models that evaluate a product flexible manufacturing system under somewhat different circumstances. Kamrad and Ernst [Tannous, 1996] consider valuation of multiproduct agreements where demand, delivery schedule, and output prices are known.

- *Process flexibility* of a manufacturing system relates to the set of part types that the system can produce without major setups. This definition is similar to the one in Browne et al. (1984). Another preferred term is mix flexibility used by Gerwin (1982) and Carter (1986). Buzacott (1982) uses the term job flexibility, which relates to the ability of the system to cope with changes in jobs to be processed by the system; Rempp (1982) and Behrbohm (1985) use the term Einsatzflexibilitaet; Freist et al. (1984), Kegg (1984), and Melcher and Booth (1987) use the term part mix flexibility; and Yamashina et al. (1986) call it variant flexibility. Falkner (1986) considers a system to be process-flexible if the manufacturing costs are relatively stable over widely ranging product mixes. The use of the term short-term flexibility by Warnecke and Steinhilper (1982) emphasizes the set of parts that can be produced in the short run.

Margrabe [Margrabe, 1978] considers the general option to exchange one risky asset for another. McDonald and Siegel [R. McDonald, 1985] extend Margrabe to include dividends in the case of European options and Carr [Carr, 1995] considers the American exchange option with dividends. Triantis and Hodder [A. Triantis, 1990] develop a model, which evaluates investments in process flexible equipment where profit margins are uncertain, switching between products is free of charge and production decisions are taken at pre-set points in time. The assumption concerning switching cost can also be relaxed to include this cost, see Triantis [A. Triantis, 1990], but adds a great deal of complexity. Triantis [A. Triantis, 1990] also develops a model under perfect competition, no switching cost and when the marginal profit contribution is uncertain. Andreou [Andreou, 1990] evaluates a process flexible manufacturing system producing two different products without any switching cost.

- *Routing flexibility* of a manufacturing system is its ability to produce a part by alternate routes through the system. Alternate routes may use different machines, different operations, or different sequences of operations. Typically, these different machines (e.g., lathe and milling machines or two brands of grinders) are those capable of essentially the same processes. It should be noted that routing flexibility is different from operation flexibility in the sense that the former is the property of a system while the latter is that of a part. Even a part with a single specified operations sequence, i.e., no operation flexibility, may still be processed using different routes through the system. It is also different from the material handling flexibility, which is the property of a specific component of the system. Thus, with the existing material handling subsystem, only some of the routes, by which it is possible to produce a part under a universal subsystem, may be feasible.

- *Volume flexibility* of a manufacturing system is its ability to be operated profitably at different overall output levels. Note that only feasible output levels are under consideration here. This definition is similar to the ones in Browne et al. (1984), Gerwin (1982), Maier (1982), Behrbohm (1985), Freist et al. (1984), and Kegg (1984). It is also similar to the demand flexibility of Son and Park (1987). Volume flexibility has some degree of interchangeability with Slack's (1987) delivery flexibility–the ability to change planned or assumed delivery dates. Bengtsson [Bengtsson, 1999] considers the value of having the option to hire personnel on short contracts when demand of a product or aggregated demand is uncertain, i.e. one source of uncertainty is considered.

- *Expansion flexibility* of a manufacturing system is the ease with which its capacity and ca-

pability can be increased when needed. The capacity is in terms of output rate per unit time, whereas capability refers to such characteristics as quality, the technological state, other types of flexibilities, etc. Note that in contrast with volume flexibility, expansion flexibility is concerned with capacity, i.e., the maximum feasible output level. Expansion flexibility makes it easier to replace or add machinery by providing for such possibilities in the original design. Ease in this connection refers to the overall effort needed for the expansion. It would include the direct cost, the indirect cost of interruption in production because of the expansion, and the speed with which the expansion can be accomplished. Trigeorgis [Trigeorgis, 1996] considers the option to expand when an investment decision is made and where the underlying value of the project is uncertain. Pindyck [Pindyck, 1988] does not explicitly address the problem of valuing expansion flexibility. He and Pindyck [H. He, 1992] use the same approach as Pindyck [Pindyck, 1988]but extend the analysis to include flexible capacity and compare this to the situation when only dedicated equipment is used.

4 Sethi and Sethi's Framework

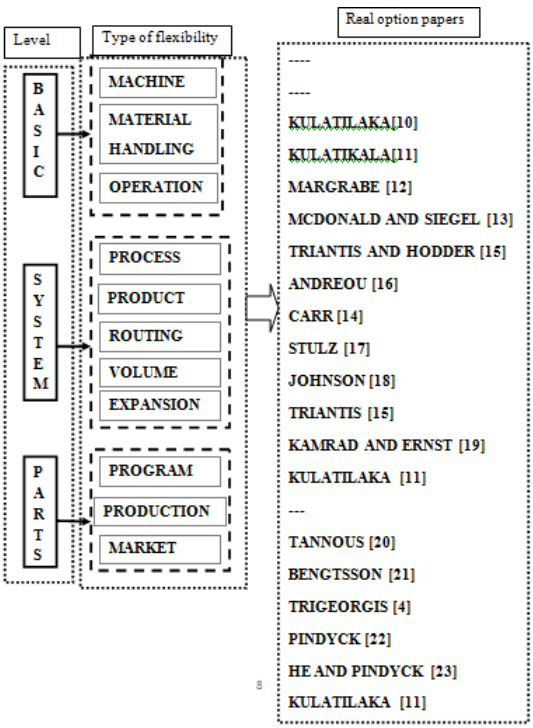

Table 1: Flexibility types to Sethi and Sethi's framework

5 Conclusion

In this paper, flexibility in terms of real options is investigated from an industrial engineering and product management perspective. Then, Option pricing theory has wide applicability in corporate finance and we have explored a wide range of these applications. We began with a discussion of some of the measurement issues that make the pricing of real options more difficult than the pricing of options on financial assets.

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Some Aspects of Improvement of Functioning Securities Market Infrastructure In The Republic of Uzbekistan

Ulugbek M. Aliyev
PhD, senior teacher
Tashkent Branch of Russian Economic
University after G.V.Plekhanov,
Republic of Uzbekistan

Abstract

The article is considering some aspects of the national securities market infrastructure improvement, which allows meet the highest requirements of international standards and growing needs of the participants of the stock market for potential investors from different countries.

Keywords :infrastructure, financial resources, social capital, sufficient economy, IPO, secondary securities market

1 Introduction

One of the key tasks of economic policy implemented in Uzbekistan is to improve the market rules of the organization and administration the financial resources. In our view, the solution of this problem is impossible without improving of infrastructure of the securities market, the ability to mobilize savings from the public and free financial resources of legal entities, guiding them in the most competitive sectors of the national economy.

Significantly increases the role of the securities market in the conditions of the growing impact of globalization on the national economy of Uzbekistan, in the light of the necessity for a highly integrated corporate structures and the entry of national corporations to international financial markets. In this regard, there is a need to create such an infrastructure of the national stock market, which must meet the highest requirements of international standards, to be able to provide the growing needs of the participants of the stock market for potential investors from different countries.

2 Discussion

The growing need of the participants of the securities market in the services infrastructure units is reflected in a number of resolutions of legislative bodies of Uzbekistan adopted in recent years and outlined specific measures to create in our country the development of investment and financial infrastructure that can meet the growing needs of the participants of the stock market and to contribute to its integration into the global financial space.

It is well known, that contemporary market economy cannot be imagined without a well-functioning financial market infrastructure in particular in the securities market which mobilize with market methods available financial assets of population and organizations, which are sent to the most competitive spheres of the national economy and provide an effective means to implement important social programs. Financial markets, the development of which is influenced by scientific and technological progress, progressive forms of organization of social production and their scope for individual initiative and competition, that provides the economies of any country by resources for effective economic growth and achieve the required level of social welfare. At the same time the financial market should be viewed as a complex of all the financial resources of the country, and the resources that are in constant motion, distribution and redistribution, changing under the influence of supply and demand on the resources of the various economic participants.

Securities market, as part of the financial market, serves as a channel, accumulating savings and transforming them into financial assets for future investment to the economy and the improvement of its productive capacity and acts as a regulator of many spontaneously occurring processes in the market economy. The role and importance of the stock market in the system of market relations are determined by the following factors:

1. Attraction of temporarily free financial funds in the form of investments for development of

production;

2. Providing the flow of capital from the decaying industries in rapidly progressing industry;

3. To raise funds to cover the deficit of the state budget;

4. The ability to assess the state of the economy on indicators of the stock market;

5. Effect of a change in the rate of inflation.

In the example of the investment processes of social capital, it is known that the flow of capital is carried out in the form of its overflow to the places necessary applications and outflow of capital from those industries where there is a surplus of it. The mechanism of this movement is known: the growing demand for any goods or services, respectively, increasing their prices, increasing profits from their production, and the industry rush free capital, leaving those industries, whose products demand is reduced, and which are economically less effective.

Securities are the instruments of ensuring the work of this mechanism. They absorb temporarily free capital, wherever it may be. And through the contract of sale helps "throw" to the desired direction. In the practice of a market economy that leads to the fact that the capital is located mainly in those industries that are actually necessary to society.

The result is the optimal structure of social production (not just placement of capital, but also by its size in individual sectors and industries) and create a balanced economy: social production, largely corresponds to public demand.

As the world experience shows, the development of the stock market has a stimulating effect on the pace of restructuring the national economy. Since the beginning of reforms in Uzbekistan to the development of the securities market received much attention.

Creation of an effective mechanism for the accumulation of free funds of investors and direct them to the manufacturing sector has been identified as a major problem in our country is an emerging securities market infrastructure. The pace and quality of the establishment of the infrastructure of the stock market, along with macroeconomic factors, are strongly influenced by:

1. The degree of information transparency of the entire stock market;

2. The level of organization and equipment of the trade and settlement and clearing systems;

3. The possibility of concluding deals with different types of securities of large and small investors, as stock exchange and on the OTC systems;

4. The level of quality of services for safekeeping, accounting for property rights on them and their re-registration;

5. The level of security risks associated with the issuance of securities and transactions on them;

6. The possibility of realization of the rights of ownership of securities (income generation, participation in the management of the company, and others.);

7. Level to guarantee the protection of the rights and interests of small and medium investors.

In addition we want to emphasize that in conditions of developed market economy secondary securities market reflects the level of development of the economic relations in society and serves as a barometer of investment climate of the real economy sector.

The secondary stock market indirectly influences the economic growth and results on activity of the enterprises through ensuring redistribution of capital in favor of effective owners and formation of model of corporate governance, optimum from the point of view of property.

The structure of owners developing under the influence of secondary stock market, as a rule, most corresponds to problems of attraction of investments and advance of the enterprises in the market. The analysis of the securities which are actively traded in stock market shows that in recent years the enterprises making construction materials consumer goods, and also sectors of services were in great demand.

Large trading volumes in sector of services were presented not only banks securities, but the enterprises of the tourist industry and communication. The considerable share of turns ofnon-raw material securities like non-oil sectors of economy testifies to a greater influence on development of stock market of branches with higher value added. It, undoubtedly, is a positive tendency for development of the national capital market.

In many countries with the developed financial markets attraction of investments by an entry into stock market is one of ways of attraction of long-term financing for the increasing business scales.

It is in such a way much more favorable to receive financial resources, than, for example, to take the bank credit. In Uzbekistan this mechanism is only formed. However it is possible to expect that in the near future in process of transition of medium business to larger, it will gain the increasing popularity and will become one of effective ways of attraction of investments.

Thus, special importance to this mechanism is given by opportunity to estimate business fairmarket price. In this case, sale of securities, as a rule, at the price exceeding face value, and the difference

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goes to the added capital. It, in turn, increases the net value of the enterprise.

Measures for formation of the effective mechanism of attraction of investments via tools of stock market, including by carrying out IPO (initial public offering), will promote increase of its appeal, as among issuers, and investors.

Now the basis for functioning of stock market is made by the enterprises, generally large, created in the form of joint-stock companies.

3 Conclusion

Based on the foregoing, it can be concluded that the timely establishment and improvement of infrastructure institutions should become one of the priority areas of institutional development of the entire of Securities market Infrastructure in Uzbekistan.

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What a Digital Marketing Strategy Means in Small Business

A.N. Samadov
Associate Prof., Tashkent State University of Economics

M.Yu. Saidkarimova,
Associate Prof., Tashkent State University of Economics

Abstract

Technological advancements such as mobile devices and applications have facilitated numerous aspects of conducting business. With the emergence and continued development of new technology and the internet, small business owners can now choose from a plethora of tools for promoting their companies. These new digital marketing tactics are giving entrepreneurs the chance to expand their marketing efforts like never before by reaching out to larger audiences, creating more relevant and engaging content, and pinpointing exactly what customers want from their firms. Digital marketing methods allow small businesses to reach out like never before and empower them to interact with the audiences they want to target but were previously unsure how to approach. Outbound techniques can still be used by small businesses to create awareness of their brands and get the word out about their products and services. However, these methods have a tendency to quickly become expensive and may not produce the tangible results that owners are hoping for. As more firms make the transition into the digital age, meeting the needs and wants of online consumers can only benefit small businesses in the long run.

Keywords :small business & personal entrepreneurships, digital marketing, economic growth, digital marketing strategy, innovative marketing techniques.

1 Introduction

Technological advancements such as mobile devices and applications have facilitated numerous aspects of conducting business.With the emergence and continued development of new technology and the internet, small business owners can now choose from a plethora of tools for promoting their companies. These new digital marketing tactics are giving entrepreneurs the chance to expand their marketing efforts like never before by reaching out to larger audiences, creating more relevant and engaging content, and pinpointing exactly what customers want from their firms. Small businesses will need to analyze and research the needs of their customers, and customize their outreach initiatives by incorporating company-specific goals. Knowing these aspects and gaining further insight into the world of digital marketing will result in the best possible operational strategies.

There are many reasons as to why effective digital marketing has become a necessity for small businesses these days. According to BusinessZone, digital marketing is the marketing of the future. While the traditional methods used for advertising and promotion can still be successful in this day and age, the fact is that the world is more connected online than ever before. This is leading to an increase in digital strategies, which could one day completely replace the more traditional approaches. As more consumers begin to adapt to technological devices, they will likely expect businesses to do the same[imp,].

Digital marketing methods allow small businesses to reach out like never before and empower them to interact with the audiences they want to target but were previously unsure how to approach. Washington Technology states that along with their high digital expectations, customers also want to see online content that fits what they are looking for. "Today, people want to see examples, hear smart people talking to them in videos and learn about how you've helped solve problems they can relate to," the news source writes.

Fortunately for small businesses, there is no single correct way to develop a digital marketing strategy. Passion Digital states that methods should depend on the needs of companies, as well as the wants of consumers. Businesses can choose how many digital aspects they want to incorporate, and may even elect to implement several initiatives at once then fine-tune their efforts based on feedback and metrics[Fre,].

One of the most important aspects of digital marketing is the website. While small businesses and merchants work hard to maintain their brick-and-mortar locations, it is also vital that they have updated, informative websites. Thewebsite should be

the start of any digital marketing initiative. Since that website acts as the hub that all other avenues will drive traffic to - from social media to search engines and even traditional marketing campaigns the website needs to be the best that it can be. This means it should be easy to use and attractive, with relevant, timely content. It also needs to be unique to companies' individual goals and the needs of their audiences - something an off-the-shelf template-based website will rarely deliver. The rise of mobile devices, from smartphones to tablets and more, is another aspect that is critical to the success of a website. An effective website will need to support a wide range of devices and respond to various screen sizes with layouts and content suited to the needs of mobile users.

Once digital marketing strategies have been put in place, small businesses must focus on how to best measure their impact. Owners do not want to go through implementing well-thought-out strategies only to learn down the line that these are not working as well as anticipated. Analyzing and measuring the return on investment (ROI) from inbound methods is an effective way for companies to analyze how their initiatives are performing and whether changes or updates should be put in place.

According to an ROI Research white paper titled "The ROI of Digital Marketing," businesses need to look at how digital channels are performing in correlation with the goals created for each in order to gauge the ROI of their marketing efforts. For example, website strategies may not have been launched with the same mission as mobile methods, so these need to be looked at in terms of whether they met the specific milestones set. In addition, efforts must be put forth to effectively analyze website, mobile and other metrics. Most of the time, these numbers and figures are not as easy to read as they seem, so owners need to make sure they understand what everything means when it comes to ROI.

In conclusion, outbound techniques can still be used by small businesses to create awareness of their brands and get the word out about their products and services. However, these methods have a tendency to quickly become expensive and may not produce the tangible results that owners are hoping for. This is where inbound strategies come into play. As more firms make the transition into the digital age, meeting the needs and wants of online consumers can only benefit small businesses in the long run.

Small business sectors will need to stay ahead of competition, as well as offer elements that help them stand out from others in their industry. By implementing inbound marketing efforts [whi,], companies are well-positioned to meet all of these goals by connecting more frequently with target audiences. The savings and advantages offered by efficient inbound marketing campaigns can help small businesses more effectively create and promote their brands in an increasingly digital world.

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Challenges and Priorities of Innovation Development of Uzbekistan

Nilufar M. Nabieva
Master of Economics
Fergana Polytechnic Institute

Nodir B. Elmuradov
Master of Economics
Tashkent State University of Economics

Abstract

The article describes the indicators of innovation activity in the Republic of Uzbekistan. Benefits and challenges of innovation. On the basis of international experience reveals the factors positively influencing the innovation, as well as presented the priorities for improvement and acceleration of innovation activities in the Republic of Uzbekistan.

Keywords :Challenges, innovation development, priorities

Scientific - technical progress is not possible without the intellectual product of the resulting innovation. Innovations are providing high-quality growth in efficiency of processes or products demanded by the market and received from investing in new technology, techniques, to new forms of work organization, etc. It seems to us for innovation and innovation process refers to a set of scientific, technological, organizational, financial and commercial activities aimed at the commercialization of existing knowledge, technologies and equipment.

Currently, the main source of economic growth, of course, considered innovation and scientific - technical progress. Without the use of innovation is almost impossible to create competitive products having a high degree of novelty and usefulness. As noted by the President of the Republic of Uzbekistan I. A. Karimov: "First and foremost, it is necessary to ensure a faster development and targeted support to those sectors and industries that can be highly competitive in the global market in the coming period can become engines of economic growth, further modernization and diversification of the economy. "[Karimov, 2014] Thus, in a market economy, innovation is an effective means of competitions, since lead to the creation of new products, reduce production costs, and increase the inflow of investments. All this in turn leads to the discovery and seizure of new markets, both domestic and external, resulting in higher image producer of new products and the whole state.

The results of the study, researchers point to the figures, in which Uzbekistan is comparable with respect to the most innovative and developed economies, as well as the direction in which it is necessary to make efforts to improve them.

The advantage of Uzbekistan is the degree of education and the availability of scientific potential. In training exercises Republic programmatic approach, which resulted in the reforms carried out in stages at all stages of education. Public expenditure on education in Uzbekistan is relatively high. Over the past few years they have consistently exceeded 10% of GDP, which is quite high.

In the education sector accounted for about 50% of the state budget. Over 70% of public expenditure on education accounts for general secondary and secondary special vocational education. In recent years, the country was carried out purposeful work on preservation and development of scientific, technological and innovation capabilities. Improve the management system of science, to expand and strengthen on a modern basis of the legislative and regulatory framework of scientific and innovative activities, reorganized the system of academic and university research, measures were taken to increase the level of innovation of production, development of the information and innovation infrastructure, small high-tech enterprises, the complex high-tech etc.

The state budget funds allocated to the annual increase of 25-30% for the financing of state scientific and technical programs. The implementation of which participate annually more than 200 scientific, educational institutions and development organizations. Currently, about 40% of the allocated budget on basic research accounts for about 50% - by application programs, and 10% - on innovation.[Anonymous, 2012]

A tax incentive for innovation scientific-technical and industrial spheres complements and expands the market mechanism of regulation of innova-

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tive processes. According to the Tax Code of the Republic of Uzbekistan organizations performing scientific-technical and innovative projects from the budget, are exempt from VAT. Tax saving increases the size of the financing of scientific and technological activities to accelerate renovation of production facilities on a new technological basis, the development and market entry of new products.

Establish a fund modernization and new technologies in large enterprises, the sources of their formation is part of the depreciation and net profit of economic entities, as well as dedicated revenues from customers. Funds allocated to the fund modernization and new technologies are used by business entities to finance research applied research, the development of innovative projects, development projects and their implementation in the manufacturing process.

The work of the organization and support of projects in the region to implement the territorial centers for innovation and technology transfer. The centers are independent agencies on scientific and technological activities; they are independent and accountable to the board, which includes representatives of local authorities, businesses, research and educational institutions. Currently, there are eight regional centers for innovation and technology transfer (Karakalpakstan, Khorezm, Bukhara, Surkhandarya, Kashkadarya, Ferghana, Andijan, Namangan).

Interaction of the national innovation system with the overall economic system of the country, understanding and building such a relationship give greater control technological and innovation development, allow competition to develop in the right direction and ensure the compliance with the strategic interests of the state. The research results of the national innovation system also revealed a number of problems in connection with what is necessary to find means of solving them in order to achieve a high level of development of the national economy. The priority of the national innovation system are now improving innovation, aimed not at creating new products, new technologies to occupy new niches in the market, but mainly for the modernization of existing technologies, production management methods. We are talking not about the development of new solutions, but of the combination of several existing technologies innovation. Industrial enterprises are, dependent on the transfer of innovations from other countries. And the main problem of the current situation is the lack of changes in the structure of the economy toward innovation associated with the emergence of new knowledge in all areas of activity: production, management, marketing, etc.

Out of this situation can be found only at the level of state regulation. On the other hand, shifting the responsibility for the state of innovation in the field of business activity on the shoulders of enterprises will not help solve the problems. Only a well-coordinated, simultaneous action at the level of the state, industry and the private sector can bring innovative sphere to a new level.

From policy depends, first of all, amending the existing legislation in terms of tax incentives for innovation; the development of public programs to stimulate innovation; support innovation in priority sectors of the economy. With regard to the implementation of innovations at the level of industry and small businesses in these sectors negatively affected by such factors as the low level of innovation financial resources, long payback periods of innovation, lack of development of the innovation infrastructure, insufficient innovation potential of enterprises, low efficiency of management of innovation processes.

The state policy in the field of creation and development of a national innovation system requires the implementation of a set of interrelated activities aimed at creating conditions for the effective management of innovation. The presence of such business environment ensures the development of competitive products through the use of advanced science and technology, so that there is increase in the share of innovative products in the structure of production. The mechanism of action of the state enterprises in order to increase the share of innovative products in the industrial structure is shown in Figure 1 [Ivanov, 2011].

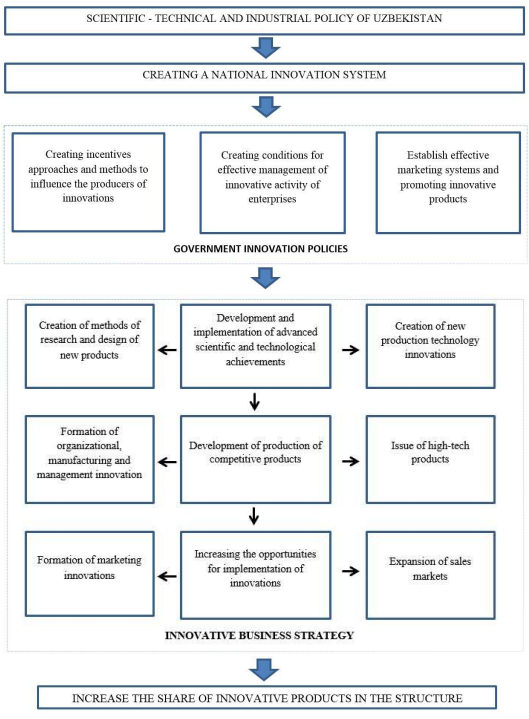

Figure 1: The mechanism of action of the state enterprises in order to increase the share of innovative products

One of the ways to stimulate innovation activities of enterprises and entrepreneurs is the creation and support of innovative infrastructure. In this regard, in addition to Figure 1 it can be noted that the creation of techno parks, business - incubators, techno poles, venture capital funds, industrial parks, the subjects of the information infrastructure is of utmost importance. Although in our country we pay attention to certain elements of infrastructure, but it is clearly insufficient, and the most important thing, is not active.

Many researchers have noted the lack of stable relations between the major actors of infrastructure - universities and enterprises, including the trade - industrial chamber of Uzbekistan. For example, Tashkent State Economic University and Fergana Polytechnic Institute, which seems to be working with businesses, including small businesses, but the nature of this cooperation is not permanent and non-systemic.

In order to achieve greater effect should improve the mechanism of interaction of the subjects of innovation infrastructure with business and organizations to implement a number of measures that will lead to Figure 2.

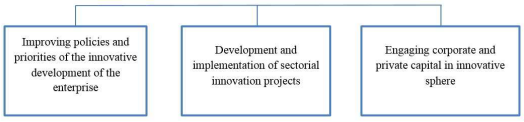

Figure 2: The activities required to support the development of innovative businesses and entrepreneurs.

For realization these events should:

- Long-term strategy of scientific - technical innovation of enterprises by industry;
- Assistance to projects with a multiplier effect, including related economic activities;
- The creation of elements of the innovation system (departments of intellectual property management and technology transfer in universities, departments, research and new technologies in branches, technology parks and innovation - technology centers, different types of property, territories of innovative development);
- Formation of training programs for the innovation sphere, and a network of centers of innovative education and training system of;
- The development of venture capital funds and direct investment.

Thus, for successful development of innovation in enterprises and business environment, it is necessary to develop appropriate program state incentives based on the study and management of the borrowing of foreign experience and analysis of the current situation.

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Make In India – A Global Manufacturing Hub

Dr.R.Lilambeswara Singh
Prof.in. Management
St.Johns College of Eng.& Technology,
Yemmiganur, Kurnool.Dt.Andhra
Pradesh.India.
lilasingh.2007@gmail.com

Abstract

This research paper aims to identify some of the key challenges in the path of development and recommend possible solutions to deal with the same. This paper has been able to identify the following major challenges in the path of making India a global manufacturing hub and accordingly make a few suggestions regarding possible solutions to deal with each of the issues: Improving the ease of doing business in India, Improving the employability of general and engineering graduates, Infrastructure development of major roads and highways in the country, Capacity addition in the power sector to meet industrial energy demand. It is to be noted that the above list is not exhaustive and there are lot of other ample challenges towards making India a global manufacturing hub. However, focusing on these issues and taking adequate measures to deal with the same will go a long way towards turning the "Make in India" vision into a dream come true.
Keywords : global, manufacturing, hub, Infrastructure, development

1 Introduction

That day, Indian Prime Minister Narendra Modi addressed an audience of 500 domestic and international entrepreneurs in New Delhi, in an atmosphere charged with euphoria following the success of India's first mission to Mars the previous day. Modi inaugurated a campaign aimed at transforming India into a global manufacturing hub and at easing its business climate for both domestic and foreign investors. A logo, a portal and brochures detailing 25 priority sectors were introduced that day. The logo shows a striding lion made of cogs with the campaign name across its body.

The stock market boom at the clear mandate given to BJP in the 2014 Lok Sabha elections and the current stock market scenario was a clear indicator of investor confidence in the Narendra Modi Government. Further steps by Mr. Modi like the "Make in India" and "Digital India" campaigns, invitation to the leaders of all the SAARC countries, US and Japan visit and various business friendly reforms have significantly created a positive business environment in the country.

However there are certain bottlenecks in the economy which the Government needs to address towards making India a global manufacturing hub.This research paper aims to analyze the key issues facing the "Make in India" vision and recommend possible strategies to deal with the same.

2 Discussion

Recent policy measures and projects to open up india's manufacturing sector are:

- 100 %Foreign Direct Investment (FDI) allowed in the telecom sector;
- 100 % FDI in single-brand retail;
- Validity of industrial license extended to three years;
- For all non-risk, non-hazardous businesses, a system of self-certification to be introduced;
- Process of obtaining environmental clearances made online.
- The Government of India is developing the Delhi-Mumbai Industrial Corridor (DMIC) as a global manufacturing and an investment destination utilising the 1,483 km-long, high-capacity western Dedicated Railway Freight Corridor (DFC) as the backbone.

FDI is defined as an investment in which the investor acquire a substantial controlling interest in a foreign industry. FDI involves ownership and/or

control of the company abroad (Markusen, Melvin, Kaempler, and Maskus, 1995). FDI is driving the process of globalization by creating an increasingly tighter global production network. Many countries experiences good economic growth through FDI (Manning and Shea, 1989), such as FDI in developing countries (includes Latin America, Asia and Central and Eastern Europe) made a comeback in about 1994 (Krugman and Obstfeld, 1997; Han, 2004).

FDI flows as one of financing type in investment is expected to boost economy growth. FDI serves as a catalyst for rapid economic growth by enabling developing countries to leapfrog developmental stages and to catch up with advanced economies, it constitutes also an important advocate for improved social norms. In this respect, FDI plays a major role in the larger development agenda of the host countries. Two of the main social aspects of development i.e. employment and environment Nevertheless, the ultimate impact of FDI on domestic economic growth depends on the diffusion of best practice through the local economy at large. This diffusion process takes place through four main channels, i.e. backward linkages with local suppliers (sourcing), forward linkages with local producers and distributors, horizontal linkages with local competitors, and linkages with local institutions such as universities and research institutes as well as vocational training centers. To developing countries, the most important channel of these is usually sourcing, i.e. the purchase of inputs and services from local instead of foreign suppliers.

FDI flows to where fast economic growth has been recorded. Avirtuous circle is observed here: at same time that FDI contributes significantly toeconomic growth, faster economic growth attracts more FDI because it increases foreigninvestors' confidence in the economy, which in turn pushes the growth rate even higher.In the least developed countries, studies have shown that FDI in fact follows, notproceeds, some initial growth or at least the promise of growth.

Additional Reasons for the New Initiative

Several pressing issues prompted the launch of this campaign. First and foremost, India needs to reboot its economy. After several years of gross national product (GNP) growth averaging 7.7%, between 2002 and 2011, this pace slowed down to around 5% in 2013 and 2014. Second, India needs more jobs for its young people. Recently, on average, 5 million new jobs have been created each year, but around 12 million people join the workforce each year. This is the other side of the demographic dividend: India's labour force is expected to grow to 600 million by 2022. Job creation will fight poverty and help divert people from agriculture, which has a low capacity to sustain their livelihood.

Third, India's economic development model has been quite peculiar, offering privileges to skilled labour often employed by foreign companies. Conversely, other economies have achieved success by first providing incentives for job-creating manufacturing industries. That is why today manufacturing in China makes up 34% of gross domestic product. The Chinese have positioned themselves as the 'workshop' of the world, accounting for 22.4% of global manufacturing, while India accounts for only 2%. India's manufacturing sector is less productive compared to its competitors and accounts for only 15% of its GDP. The government has set a target of 25% of GDP by 2022.

Reaction to ' Make in India'

'Make in India' has received widespread support from industry leaders from both India and abroad as well as from the Confederation of Indian Industry (CII). Some companies, including foreign ones, have already announced plans related to the initiative. Reserve Bank of India Governor Raghuram Rajanin dismissed the idea of introducing a policy targeting the manufacturing sector, just because it had worked for China, given how different the two countries are. He underlined the risks of an export-driven approach in a global economy still in crisis, and where many industrialized economies are strengthening their own manufacturing capabilities. 'The world as a whole is unlikely to be able to accommodate another export-led China', he said.

C K Ranganathan, the founding chairman of popular Indian household brand CavinKare, said that he would rather support a 'Made in India' approach in which India would be creating its own internationally renowned brands. Srikant Jena, a former government minister, stated that efforts to resolve caste and gender inequalities as well as regional imbalances were missing from the initiative.

3 Conclusion

Although the ease of doing business score went down to 142 from 134 last year, the World Bank has taken care to distance this downslide from the NDA government which took charge barely a week earlier and World Bank has used data till May 2014 whereas most measures to improve doing business were undertaken subsequent to that. The various measures undertaken by the NDA Government to address issues related to economic growth, delay in Government decisions and reforms in the Labour law, Land law and taxation have kick started the manufacturing sector and shot the GDP growth by 5.7 % in the last quarter.

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The Modi Government has also signed a staggering USD 35 Billion investment deal with Japan for infrastructure development.

If governance continues in the current manner, we can definitely hope to see significant and sustainable growth in the manufacturing sector and progress towards India becoming aGlobal manufacturing hub.

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Importance Using Motivational Methods On Involving Consumers

SHaxnoza Ergashxodjayeva Djasurovna
Tashkent State University of Economics , Uzbekistan
ergashxodjaeva_sh@mail.ru

Jamshid Jalilov Ganijonovich
Bukhara Engineering- Technological Institute, Uzbekistan
Jalilovjg@mail.ru

Abstract

The main goal of the paper is discussing motivation methods for consumers of production on food industry enterprises. The importance of consumer motivation is growing all the time in the enterprises. This paper is about the motivational methods. The main aim was to find out the consumer satisfaction in industry enterprises and to find out possible aspects for improvements.

Keywords :Motivation, consumer motivation, motivational method of organizing sale

1 Introduction

Motivation is the cause of an individual's behavior or the reason that an individual carries out some activity. Motivation is the starting point for all consumer behavior, that driving force of a person, which pushes them to action, since the investigation of motivation is central to understanding the gain, consumption and disposition of goods, services and ideas. The importance of consumer motivation is growing all the time in the enterprises.

With increased competition, diversity of assortment and importance of social factors, consumer behavior becomes more complex and distinguished being influenced by different aspects of consumers' knowledge, cognitive representations and external environmental incentives. People chose products according to the lifestyle they aspire to, often acting irrationally, and value things that are distant from a single product but have a strong impact on the preference and final choice for a certain product. Therefore, the challenge is to figure out which processes, factors and incentives, among everything that a consumer experiences and is surrounded with, define particular consumer behavior within a given situation and circumstance. Marketers need to understand the principal motivation behind product consumption in order to precisely target current and potential customers.

2 Discussion

The motivational theories which are relevant to marketers, Murray's psychogenic needs, Maslow's hierarchy of needs, Dichter's consumption needs, McCllelland's theory of learned needs and a selection of marketing scholars' lists of customer needs and goals are summarized. The literature classifying motives according to simplified schemes and a comprehensive scheme are explained. The motivational theories, drive theory, expectancy value theory and opponent-process theory, are discussed. Major areas of motivation, value and emotion are reviewed. Involvement, type of involvement and methods affecting involvement are reviewed.

Motivation refers to the processes that cause people to behave as they do. From a marketing perspective the study of motivation represents a search for principles that can help in understanding why people initiate, choose or persist in specific actions. Motivational targets motives for specific behavior and tries to analyze them.

Motivation is a basic idea in human behavior. Several basic concepts are integrated to an understanding of human motivation. Motivation can be described (Schiffman and Kanuk, 1994) "as the driving force within individuals that impels to action". Wells and Prensky (1996) was defined motivation as "the process by which an individual recognizes a need and takes action to satisfy it".

Motivation can be defined as " the state of drive or arousal that impels behavior toward a goal-object. As a result motivation has two components (a) drive or arousal, which is an internal situation of tension that causes actions purported to decrease that tension, and (b) goal-object, that is something in the external world whose attainment will decrease the tension" (Sheth et al., 1999).

Kotler,P and Amstrong G. (2012) was defined consumers motivation as "Consumers whose motivation is self-expression desire social or physical activity, variety, and risk".

Most concepts of consumer motivation suggest universal sets or categories of motives, needs or goals which can be applied to any type of product, consumer and pattern of behavior. The major disadvantage of these sets is that they appear unable to account for specific actions and to recognize the situational variability of consumer behavior.

Scientists in industry management and marketing methods by studying the effect of motivating people, almost all the researchers did not explain that one group of internal method will be main.

Uzbek scientists as Q.H. Abdurahmonov, F.W. Mamarasulov, D.N. Rakhimova, R.A. Ubaidullaeva, Z.R. Khudayberdiyeva (Abdurakhmanov Q & Mamarasulov F, 2006; Shodmonov Sh, Alimov R & Juraev T, 2002; Rakhimova D, 2000; Ubaydullaeva R, 1999) also produce effective research work on individual areas of motivation methods in subjects of economics, management, marketing, psychology and sociology.

Uzbek scientists Zayniddinov Shermuhamedov, Murakaev (Zayniddinov SH. Shermuhamedov A, Murakaev I, 2005) methods influence on the part of the authorities to consumers were divided into:

- Economical methods.
- Organizational methods.
- Social and psychological methods.

Administrative influence on people in economic practice is a management method. Motivational methods are a complex of factors, means, key factors and stimulus promoting stimulation of separate persons or a group of persons to certain purposeful behavior. The motivation in marketing goes on stimulation of buyer to big and long buys, preservation of it's loyalty.

In our opinion, the organizational purposes is necessary to divide the methods of motivation applied to introduction of necessary changes in actions of people under motivational influence, adapting these actions following group:

Motivational methods are complex of factors, means, key factors and the stimulus stimulating buyers to get more and with loyalty of goods on the enterprise. One of the most significant characteristics of the organization is its interrelation with an environment. The organizations are completely dependent on world around - from an environment - both concerning the resources, and concerning consumers, users their results which they aspire to reach.

1. **Psychological and behavioral method of motivation**. This motivational method include image of the manufacturer and its production; influence of sponsor's activity; care of that production always remains in memory; loyalty of the trade mark; a fashion; regional convenience of placing of trade places ; light exposure of sale places ; air exchange in sale places; culture of the reference of sellers; appearance of sellers; speed of servicing by sellers; skill of the seller in trade sphere; features of representation of recommendations sellers; test possibility; after selling service (granting of service services); the guarantee of production; a convenient arrangement of the goods on showwindow.
2. **Motivational method of organizing sale**. This motivational method include Cleanliness of places of sale; a coziness and convenience of selling places; originality of goods, transparency the got goods (not forge); appeal of the got goods; out of danger and cleanliness of the got goods; a gratefulness of the got goods; convenience exploitation of the got goods; ecological cleanliness of the got goods; an aesthetic kind of the goods got by you; harmlessness of the got goods; efficiency of application of the got goods; high quality of the got goods.
3. **Motivational method of participating in management at decision-making**. This motivational method include condition of action of system of reception and registration of orders; speed of work on orders; observance of conditions of delivery of orders; system of reception of complaints concerning quality of a product; system of reception of complaints on the trade organization; system of reception of complaints to goods deliveries; system of reception of offers by kinds and production assortment; acceptance of offers concerning payment forms; acceptance of offers on decline of time of performance similar to; acceptance of offers on the sale organization; recommendations about application, studying results of application; encouragement of actions under the purchase recommendation to other consumers; preservation of continuous communications with the enterprises; selection of data on demand and requirement for sale places.
4. **A material method of motivation**. This motivational method include The prices with grants; interesting actions; selection carrying out between buyers; measures on sale stimulation; a method of coupons; additional services during sale; a method of granting of samples for sale acceleration; possibility of change of forms of payment; use lottery to interest for purchase; continuous programs for the buyer; extra quantities for the consumer; gifts by mail to the consumer; a method of monetary compensations for increase in buys of the con-

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sumer; the price of the complementary goods; the price of the interchangeable goods.

5. **Motivational method of personnel and communication development**. This motivational method include possibilities of reception of the information on the goods; increase of experience of the consumer in the period of use of the goods; support by given (knowledge); publicity in mass-media; the advertising companies on TV; the advertising companies on radio; the external advertising company; the advertising company on the Internet; data on properties of the goods on a label; reception of data from trading workers; maintenance with the information on goods characteristics; rules of using goods; a statement of advantages and goods lacks; comparison characteristics of two and more goods; data of the seller on goods assortment.

6. **An administrative method of motivation**. This motivational method include the limited sales volumes; the limited prices of realization; presence of the hygienic certificate of the goods; working life of the got goods; toksikolog-hygienic examination of the goods; struggle against a fake of own production; certification of the goods; the state supervision over manufacturers; the need to safety of the got goods (service); conditions of faultless make; goods warranty period; replacement of the returned goods by another; the refund for the returned goods; withdrawals from the reference of the unsuitable goods.

Impotance motivational methods is possible to draw the following general conclusion: Motivation is a complex dynamic, because of people behave differently when faced with the same challenges under similar circumstances. It is important however to continuously measure consumer motivational methods to proactively anticipate areas of concern that might lead to a decline in the methods of motivation within the organization, which could have an adverse effect on the profitability of the organization because of decrease in overall productivity and performance.

3 Conclusion

This research represents a first take on to motivational methods consumers of industry enterprises' products. Perspective, we believe that this is an emerging research topic that will gain more interest for consumers of industry enterprises' products.

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Determinants of Willingness to be Health Insurance Customer in Indonesia: Proposed Research Model

Kasir Iskandar
Doctoral Program of Economic
Gunadarma University

Abstract

The aim of this paper was to examine individual preferences for willingness to purchase health insurance (private or social). The study was a meta-analysis of previous researches. Variables which influencing consumer willingness to purchase health insurance were discussed and identified based on previous researches. Subsequently research gaps were formulated and proposed for future research.

Keywords :health insurance, formal and informal sector, risk attitude, social communication, pricing, insurance knowledge

1 Introduction

World Health Organization (WHO) is encouraging all member countries to develop and ensure Universal Coverage. There are around 3 billions people lack of health cover. They are mostly informal worker in low to middle income countries (Drordan, 2014). Indonesia, as one of low to middle countries, is included to the problem arising. Biro Pusat Statistik (Bureau of Statistics Central, BPS) of Indonesia reported in 2012 there is 62,3% workforce working in informal worker, which is equal to 77.77 millions. Most of the worker in informal sector no protection except who belong poverty.

The lowest premium for social health in Indonesia is Rp 25.500,00 per month per person or equivalent US $ 1.74 and the highest is Rp 59.500,- In Iran the average Willingness to Pay (WTP) for social health insurance per person per month is 137 000 Rial (equal to 5.5 $US). Head of household with higher levels of education and income generally has more WTP for the health insurance. In addition, the WTP increase proportionally to the number of insured members of each household and inverse to the family size ([Nosratnejad et al., 2014]).

Indonesian government has decided to establish social health insurance funded by premium payment. For this purpose, government issued Law no 40 year 2004 about National System Social Security which is known as Jaminan Kesehatan Nasional (JKN- Health Insurance). To implement this law, a government organization named as Badan Penyelenggara Jaminan Kesehatan (BPJS) was established based on Law no 24 year 2011. Based on this law, all Indonesian citizens should be registered as JKN member. In December 2014 total member of JKN is 133,4 millions. Among them, 89,4 millions are poor people and government pay for their insurance premium. Taken into account total of Indonesia population is around 250 millions, then around 110 millions (almost 44%) do not have health protection yet. Government targeted by the year 2019, all Indonesian citizen should be registered on JKN. It raises question how to convince Indonesian citizen to be registered on JKN.

Thus the objective of the paper was to formulate willingness model on health insurance behavior.

2 Theoritical Framework

2.1 Consumer Behavior

Consumer behavior as a field of study is constantly growing. From a marketing perspective, consumer behaviour most probably became an important field of study with the development of the so-called marketing concept. Consumer behavior is an action that is directly involved in obtaining, consuming, and disposing of products and services, including the decision processes that precede and follow the action ([Bagozzi. and P., 2004]). Consumer behavior models have been developed extensively by many scholars. Prominent are Marshallian economic model (Schiffman & Kanuk, 1997), the Pavlovian learning model (Schiffman & Kanuk, 1997), the Freudian mathematical models (Schiffman & Kanuk, 1997), gravity model (Huff, 1964; Haynes & Fortheringham 1984; Mayo, Jarvis, & Xander 1988), dynamic model (Oliver, 1997; Jacoby & Chestnut, 1973), Theory of Reasoned Action ([Ajzen and Fishbein, 1980]), Theory of Planned

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Behavior ([Ajzen, 1991]), and other.

Theory of Reasoned Action (TRA) ([Fishbein and Ajzen, 1975]) has become the attention of researchers since decades ago. This theory has been tested on wide variety of cases, and support for TRA has been provided by studies involving various behavioral domains (such as Manstead, Proffitt & Smart, 1983; Pagel & Davidson, 1984; [Budd et al., 1984]; [Hoogstraten et al., 1985];[Young and Kent, 1985]; Budd, 1986; [Fishbein et al., 1986]; [Timko, 1987]; Cable, Knudson, Udd & Stewart, 1987; [McCaul et al., 1988]; Burnkrant & Page, 1988; Hennig & Knowles, 1990; Brubaker & Fowler, 1990; Netmeyer & Burton, 1990; [Stasson and Fishbein, 1990]; [Vallerand et al., 1992]; Mykytyn, 1993; Felton, Dimnik & Northey, 1995; Gibson & Frakes, 1997). However few scholars proved that TRA is not valid for all behaviors (such as [Thompson and Panayiotopoulos, 1999]; Johnston & Lewin, 1996).

Among behaviors which confirmed support the TRA are mothers' infant feeding intentions (Manstead, Proffitt & Smart, 1983); contraceptive behavior ([Pagel and Davidson, 1984]); seat belt use ([Budd et al., 1984]; [Stasson and Fishbein, 1990]); recreation behavior ([Young and Kent, 1985]);dental hygene behavior ([Hoogstraten et al., 1985]; [McCaul et al., 1988]); smoking behavior ([Budd et al., 1984]); voter participation ([Fishbein et al., 1986]); the effects of interpretive messages on behavior change (Cable, Knudson, Udd & Stewart, 1987); delay behavior in seeking medical care of breast cancer ([Timko, 1987]); moral behavior in sport ([Vallerand et al., 1992]), etc. In contrary side, Thompson & Panayiotopoulos ([Thompson and Panayiotopoulos, 1999]) and Johnston &Lewin (1996) showed that TRA is not suitable to use in evaluating decisions in an organisational context because of the dynamic and intricate multiphase, multi-person, multi-departmental and multi objective nature of the decision processes in organisation.

In an attempt to evaluate the rejection of TRA, regardless the TRA is simply applied to behavior, researchers have turned their attention to possible modifications that could make the theory an even better predictor of behavior. To mention few of them are Theory of Planned Behavior (TPB) by Ajzen (1991) and Technology of Acceptance Model (TAM) by Davis (1989). The TPB was derived from the TRA, which assumed that most human social behavior is under volitional control and, hence, can be predicted from intentions alone. According to the TPB as shown on Figure 1, perceived behavioral control, along with behavioral intention, can be used directly to predict behavioral achievement. Central factor in the TPB is the individual's intention to perform a given behavior.

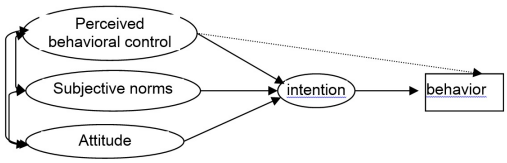

Figure 1: Theory of Planned Behavior[Ajzen, 1991]

The TPB was challanged by trying behavior particularly related to prediction and behavioral aspects by Bagozzi and Warshaw (1990). Bagozzi extensively performed research on consumer behavior both on decision making process and consumer actions ([Bagozzi. and P., 2004]; Bagozzi, Gürhan-Canli, and Priester, 2002; Bagozzi, Dholakia, and Basuroy, 2003; Bagozzi and Lee, 2002). Bagozzi ([Bagozzi. and P., 2004]) defined consumer's action as directly involved in obtaining, consuming, and disposing of products and services.

2.2 Insurance

There are four main models for financing health, namely:

1. National health insurance,
2. Bismack social health insurance,
3. Beveridge models, and
4. Out–of pocket model (Deloitte, 2012).

Indonesian government has decided to choose social health insurance for Universal Coverage.

Health insurance system has been applied for informal sector worker in low to middle income countries. However the result has not satisfied yet, the penetration is very low ([Dror and Lucy, 2014]). They found that in order to grow demand for health insurance in informal sector in LMIC, it is necessary to strengthen ground governance consistent with ground up based decision making under local condition.

Choosing health insurance policy is a complex decision due to a large set of al-ternatives. An increase in the number of alternatives increases decision-making time; makes subjects consider a lower fraction of the available information; makes it more likely that subjects will switch; and decreases the quality of their decisions. The introduction of positive costs of switching make people switch less often but improve the quali-ty of their decisions. Finally, if health deteriorates only gradually, individuals tend to stick to their current policy too long ([Schram and Sonnemans, 2008]).

Varghese (2014) proved that in Kerala India personal factor, social factor and marketing factor influence decision for purchasing health insurance. In

South Africa and Ghana, 62% and 55% of total respondents, respectively, were in favour of a progressive financing system in which richer groups would pay a higher proportion of income than poorer groups, rather than a system where individuals pay the same proportion of income irrespective of their wealth.

The effect of being insured under the voluntary component of Vietnamese Health Insurance, on patterns of treatment seeking behaviour. A multinomial logit model is estimated using household survey data from three provinces in Vietnam. Decisions regarding both the type of provider sought and type of care received analysis. Insurance status is treated as both exogenous and endogenous to account for potential selection bias. The results indicate that, overall, insured patients are more likely to use outpatient facilities, and public providers, an effect that is particularly strong at lower income levels (Jonett et al, 2004).

From a policy point of view, the WTP value can be used as a premium in a society. An important finding of this study is that although households' Willingness To Pay is not more than the total insurance premium, households are willing to pay more than the premium they ought to pay for health insurance coverage. That is, total insurance premium is 150 000 Rials and households ought to pay approximately half of this sum. This can afford policy makers the ideal opportunity to provide good insurance coverage for medical services according to the need of society ([Nosratnejad et al., 2014]).

Ama et al ([Ama et al., 2014]) show that health insurance and travel time to health facility are significant determinants of health care demand. Overall, compared to the uninsured, the insured are more likely to choose formal health facilities than informal care including self-medication when ill. Research of Ama et al ([Ama et al., 2014]) with title " Treatment seeking behavior social health insurance in Africa made conclusion that health insurance and travel time to health facility are significant determinants of health care demand. Overall, compared to the uninsured, the insured are more likely to choose formal health facilities than informal care including self-medication when ill. According to Ama et al ([Ama et al., 2014]), utilization as function of travel time, characteristics of illness, the insurance status of individual, demographic and socioeconomic can be express as $U = f(T, P, I, D)+e$. Daniel et al ([Daniele et al , 2002]) mention that income, education, private insurance and supply characteristics as factor of utilization health insurance. Jeong (2010) using meta analysis found that the relative non compliance of the self employed insurance due to partly to lack of transparency regarding their income. Imperfect information and insurance premium and fee affect enrollment. The demand for insurance elastic in the sense that small subsides generate substantial enrollment effect (Asuming, 2013). According to Aidoo et al (2010), using logistic regression found that factor influence willingness to adopt cop insurance are age, farmer size, land tenure, annual income, farmer experience and gender.

The root of the theory of the proposed research is the theory of planned behavior. Morris ([Morris et al , 2012]) drawing figure by adopting from Munro et al explain about behavior theory as figure 2:

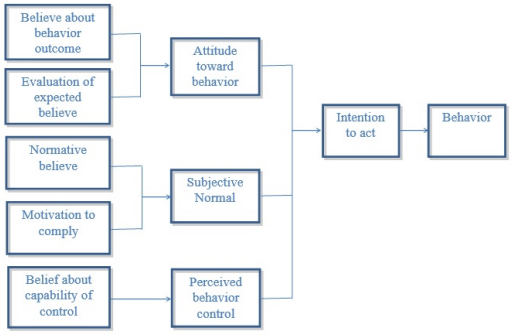

Figure 2: Behavior theory

Cohen (1991) proposed a model of consumer purchase decision, suggesting mar-keting inputs and psychological inputs results in consumer purchase decision.

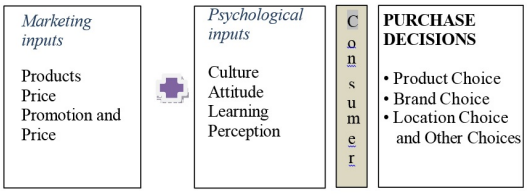

Figure 3: Consumer purchase decision

2.3 Proposed Research Model

Based on above mentioned research gaps, the proposed model is shown on Figure 4.

Hillton and Webster (2004) explain that the word risk is common and widely used part today vocabulary, relating personal circumstances, society and business. A risk can be defined as an uncertainty that could have positive or negative effect or one or more objective. While Attitude is state of mind, mental view or disposition with regard to a fact or state. Cook (2001) explain that understood through knowledge and understanding of a definition social reciprocity. Definition social reciprocity is social interaction and is displayed through the use of joint attention to share experiences and emotions with another person for a variety of events and in a variety of contexts.

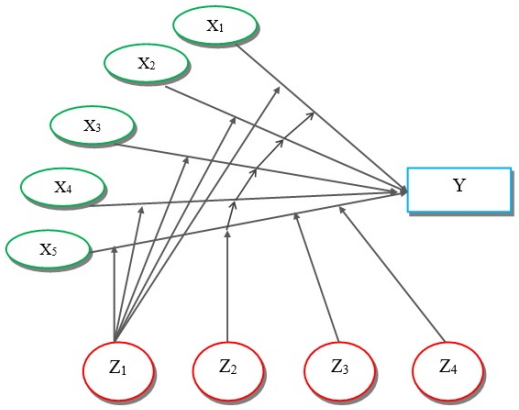

Figure 4: Proposed model

$X_1 = Risk\ Attitude$
$X_2 = Social\ Communication$
$X_3 = Pricing\ of\ Health\ Insurance$
$X_4 = Knowledge\ of\ Health\ Insurance$
$X_5 = Experience\ of\ Illness$
$Zn = Demography\ Factor\ as\ a\ predictors$
$Y_1 = Having\ policy\ health\ insurance\ or\ not$

Pricing or premium is the amount of policyholder or their sponsor pays to the health plan to purchase coverage. Boundless.com define illness or disease is a state of poor health, condition of the body or mind that cause pain, dysfunction, or distress can be deemed an illness. Sometime the term is used broadly to include injuries, disability, syndrome, infections, symptom, deviant behavior. Understanding about covering benefit, type of reimbursement, deductible, coinsurance, limitation, exclusion and procedure for getting benefit health insurance as definition of knowledge of health insurance ([Marquis, 1981]).

3 Methods

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Moderating Effect of Income Level on The Relationship between Shopping Style and Consumer Impulse Buying Behavior: Empirical Evidence from the City of Depok, Indonesia

Yunita Dianti and Toto Sugiharto
Faculty of Economics, Gunadarma
University, Jakarta, Indonesia
tsharto@staff.gunadarma.ac.id

Abstract

In the last decade, retail business in Indonesia has experienced significant development. It triggers a substantial change in lifestyle and shopping patterns of society, particularly in impulsive buying behavior. This study was accomplished to analyze the moderating effect of income level on the relationship between shopping style and impulse buying behavior. Primary data used in this study was obtained from 100 respondents which were randomly selected using accidental sampling methods through questionnaires that have been tested for validation and reliability. Having qualified in the classical assumption tests, the obtained data were analyzed using moderated linear regression analysis to test the formulated hypotheses. It is uncovered that impulse buying behavior is affected significantly by shopping style. However, this causal relationship is significantly moderated in a negative way by income level. Income level breaks one's impulse buying behavior by approximately 25 percent. This indicates that effect of shopping style on impulsive buying behavior is lessened by income level..

Keywords : shopping style; income level; impulse buying behavior; moderating effect.

1 Introduction

With the advancement of economic status and self-conscience which is triggered, among others, by rapid economic development as well as rapid and dynamic changes in information and communication technology, in the last decade, community's impulsive buying has changed and tend to increase substantially. Changes in impulsive buying behavior—defined as the unplanned buying behavior of the consumers [Kollat and Willett, 1967] or an instantaneous purchase process when there is no aim to purchase the commodity [Beatty and Ferrell, 1998]— were not only experienced by community in developed country such as the United States, for example (Kacen and Lee, 2002), but also by those who live in developing countries i.e., India, Malaysia, and Pakistan [Ahmad, 2011] including, it is generally believed, Indonesia (Japarianto dan Sugiharto, 2011).

According to Karbasivar and Yarahmadi (2011) and Taushif and Gupta (2013) , impulse buying is unreflective urge to buy something immediately; the impulse to buy in that the purchase is made without engaging in a great is hedonically complex and may stimulate emotional deal of evaluation. Therefore, individuals buying impulse is less conflict. Additionally, impulse buying is prone to occur with likely to consider the consequences or to think carefully before making the purchase (Rook, 1987). Attention of those with impulse buying behavior is focused on responding to immediate gratification urge to buy rather than solving existing problems or find items to fill a need that has been determined. Ultimately, in line with general impulsiveness, impulsive buying is immediate, so that impulse buying occurs when consumers experience a sudden, often powerful and persistent urge to buy something [Rook, 2004].

Consumers are affected by both internal and external factors of impulse buying. Since impulse buying is often stimulus driven, increased exposure to certain external stimuli increases the likelihood of impulsively buying (Rook, 1987; Karbasivar and Yarahmadi, 2011). There are four types of impulse buying: pure, reminder, suggestion, and planned impulse buying. *Pure* impulse buying is an escape purchase which breaks a normal buying pattern. *Reminder* impulse buying takes place when a consumer finds an item remembers that the stock at home is low or finished. *Suggestion* impulse buying occurs when a consumer finds a product for the

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first time and visualizes a need for it. *Planned* impulse buying occurs when a consumer makes specific purchase decisions on the basis of price specials, coupon offers and the something similar to that (Karbasivar and Yarahmadi, 2011; Graa et al., 2014).

Various factors are assumed to be associated with impulse buying behavior among consumers. These include (i) consumer's mood or emotional state (Rook, 1987), (ii) trait buying impulsiveness (Rook & Fisher, 1995; Weun *et al.,*1998), (iii) demographic factors (Wood, 1998; Ghani *et al.,* 2011), and cultural and lack of shopping list (Mihic & Kursan, 2010). These factors have been studied as variables that influence consumer impulse buying. However, majority of these studies were accomplished in developed economies. In Asia, such a study has been relatively limited.

The current study is focused on the effect of consumer shopping style and consumer income level on consumer impulse buying behavior. In addition, this study was also examine the interactive of these independent variables on consumer impulse buying behavior or more precisely the moderating effect of consumer income level on the causal relationship between consumer shopping style and consumer impulse buying behavior.

2 Research and Method

One hundred shoppers, which were selected using accidental sampling methods, were involved in this study. Data representing research variables were collected from respondents using questionnaires which have tested for validation and reliability. After having been tested for normality, heteocedascity, autocorrelation, and mulicollinearity (i.e., classical assumption tests), multiple regression analyses were performed to the proposed hypotheses.

Two regression models were developed and empirically tested, namely regression model without moderating variable (i.e., income level serves as pure independent variable) and regression model with moderating variable where income serves both as independent variable as well as moderating variable.

3 Results and Discussions

Effect of shopping style and income level on impulse buying behavior

Regression coefficients representing strengths and direction of causal relatioships or the effect of shopping style and income level on consumer impulse buying behavior are presented in table 1 which follows.

As clearly depicted in the table above, shopping style of consumers affects significantly their impulse buying behavior ($p<0.01$). This indicates that comsumers with high shopping style tend to perform, according to Beatty and Ferrel (1998), instantaneous purchase process when there is no aim to purchase the commodity. Interestingly, as also shown in the same table, income level was found to have no significant effect on impulse buying behavior. Consumer behavior which relates with impulsive buying has no relatioship with consumer income level. This occurs when this variable, i.e. income level, serves as pure independent variable.

Moderating effect on income level on the relatioship between shopping style and impulse buying behavior

Regression coefficients representing strengths and direction of causal relatioships or the effect of shopping style and income level on consumer impulse buying behavior and moderating effect of income level on the relationship between shopping style and impulse buying behavior are presented in table 2 below.

with the result of the first regression model, with a subtantial difference in magnitude (i.e., 0.427 versus 1.192), shopping style was found to have highly significant effect ($p<0.01$) on concumer impulse buying behavior. Surprisingly, however, in this second model—where shopping style and income level are interacted in order to examine the moderating effect of income level on the relationship between shopping style and consumer impulse buying behavior—income level, even though in a relatively low magnitude (i.e., 0.033) was found to significantly affect ($p<0.01$) consumer impulse buying behavior.

It was also uncovered that income level significantly moderates ($p<.01$) the relationship between shopping style and consumer impulse buying behavior. This means that income level, after having been interacted with shopping style, has the potential to weaken the effect of shopping style on consumer impulse buying behavior. Income level is found to reduce the effect of shopping style on consumer impulse buying behavior by approximatelly 24 percent (i.e., $0.008*0.033=0.24$).

It can be summarized that impulse buying behavior of those consumers with high shopping style will decrease, even though in a relatively low magnitude, when they have more or higher income.

4 Conclusion

Impulse buying behavior of consumer are positively correlated with and significantly affected by shopping style. Income level without having been in-

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Table 1: Coefficient of Regressions, Statistical Significance, and Coefficient of Determination

Items	Coeficient Regression		Significance	Coefficient of Determination
	Unstandardized	Standardized		
Intercept	33.265		0.000***	0.101
Shopping Style (SS)	0.427	0.321	0.001***	
Income Level (IL)	0.001	0.054	0.580***	

Note: *** significant at alpha 1 percent (i.e., highly significant)

Table 2: Coefficient of Regressions, Statistical Significance, and Coefficient of Determination

Items	Coeficient Regression		Significance	Coefficient of Determination
	Unstandardized	Standardized		
Intercept	14.130		0.047***	0.182
Shopping Style (SS)	1.192	0.896	0.000***	
Income Level (IL)	0.033	2.378	0.002***	
SSL*IL[1]	-0.008	-2.343	0.003***	
Note:	[1]interaction between shopping style and income level			
	*** significant at alpha 1 percent (i.e., highly significant)			
	*** significant at alpha 1 percent (i.e., highly significant)			

teracted with shopping style has no significant effect on impulse buying behavior. However, when income level is interacted with shopping style it significantly affect impulse buying behavior. This implies that consumers with high shopping style and have high income level tend to have higher impulse buying behavior.

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Bioeconomics, Neuroeconomics and Neuromarketing: New Approaches to Customers and Businesses

Elena Horská
Faculty of Economics and Management, Slovak University of Agriculture in Nitra
elena.horska@gmail.com

Zuzana Lajdová
Faculty of Economics and Management, Slovak University of Agriculture in Nitra
zuzana.lajdova@gmail.com

Zuzana Kapsdorferová
Faculty of Economics and Management, Slovak University of Agriculture in Nitra
zuzana.kapsdorferova@uniag.sk

Abstract

New approaches that integrate several disciplines such as economics, biology, psychology, neuroscience etc. are considered appropriate for providing better explanation of economic events and complex economies of today. Bioeconomics, originated from the synthesis of economics and biology, intends to explain economic events using a biological basis and vice versa and this discipline is important to the protection of environment and life support system. Bio-economic modeling provides the assessment of the impacts of environmental management changes based on evaluation of the costs and benefits linked with environmental resource usage and it determines the optimal level of resource extraction to maximize economic profits. Neuroeconomics is a natural extension of bioeconomics focusing on behavioral dispositions and behavioral patterns of evolutionary processes. Neuromarketing crosses traditional boundaries between neuroscience, neuroeconomics and marketing research. The aim of the paper is to provide a theoretical framework for bioeconomics, neuroeconomics and neuromarketing based on the recent empirical studies and describes different techniques used in these new progressive approaches.

Keywords :bioeconomics, decision-making, neuroeconomics, neuromarketing

1 Introduction

New approaches that integrate several disciplines such as economics, biology, psychology, neuroscience etc. are considered to provide better explanation of economic events and complex economies of today. Economic concept based on biological materials and resources is aimed to create the economy with low emissions in line with requirements of sustainable agriculture and fisheries, food safety and better utilization of renewable energy for industrial processes in ensuring biodiversity and environmental protection. Another new approach in comparison to conventional economic theory is neuroeconomics that studies the impact of emotional, social, psychological and other factors on the various economic decisions and explains the principles of decision-making process and behavioural strategies of consumers based on the neurobiological and psychological aspects. Additionally, marketing theory and practice use the application of neuroscience for better understanding of consumer choice and for influencing consumers´ behaviour.

The paper provides a theoretical framework for bioeconomics, neuroeconomics and neuromarketing based on the recent empirical research and describes different techniques used in these new progressive approaches.

The paper is the result of the primary and secondary research in the national research project VEGA 1/0874/14 Using Neuromarketing in Visual Merchandising and International Food Educational Project Erasmus+ Strategic partnership Food Quality and Consumer Studies Nr. 2014-1-SK01-KA203-000464. Also, this work was co-funded by European Community under project no 26220220180: Building Research Centre „AgroBioTech".

2 Methods

The main aim of the paper is to summarize and discuss the key topics: bioeconomics, neuroeconomics and neuromarketing and to provide an overview of the research techniques and models used in these fields. Recently published international literature dealing with the selected topic has been examined. In order to fulfill the main aim, the comparative method is used for comparing the researcher's opinions on the chosen disciplines and for explaining differences between neuroeconomics and neuromarketing.

3 Result and Discussion

Nowadays, a new and more central role is given to the more sustainable direction of the development of the economy based on the production and usage of biological resources (forestry, fisheries, agriculture, biomass-based industries etc.). [Sundar, 2012] explains that the traditional branch of economics does not link economics with biology, however, a progressive branch of social science called bioeconomics, originated from the synthesis of economics and biology, intends to explain economic events using a biological basis and vice versa. More specifically, it is a change in the development of the economy-environment disciplines such as natural resource economics, environmental economics and ecological economics. Bioeconomics is important to the protection of environment and life support system. The health status of the people can be increased by the production of goods and services through bio-economic method that develops green products and promotes green consumerism. Furthermore, the economics knowledge on utilization of biological resource is needed for achieving sustainable development.

[Boncoeur and Thébaud, 2011]point out that the interaction of biological and economic processes is represented by bio-economic model and it is usually made up of three components: Biological component describes the bio-ecological processes at work; Technical component describes the way human activities interact with the bio-ecological processes; Economic component describes the results of these activities in term of (market or non-market) costs, benefits and the consequences of these results on human behaviour. Bio-economic modeling provides the assessment of the impacts of environmental management changes based on evaluation of the costs and benefits linked with environmental resource usage and it determines the optimal level of resource extraction to maximize economic profits. Various bio-economic models have been developed and tested on different farming systems and under heterogeneous agro-ecological conditions; for example, bio-econometric modeling of fisheries are used to determine the optimal levels of effort under different fisheries management regimes (harvest levels, season length etc.). Agro-economic models predict the impact of changes in environmental resources (water and soil quality etc.) on agricultural production and the following approaches could be used for bioeconomic modelling of agricultural systems: accounting (descriptive book-keeping systems e.g. gross margin analysis), regression (statistical estimates of site-, or region-specific agro-economic production functions based on observed relationships between prices, farm inputs, policies, and physical characteristics of the land) and mathematical programming aimed to optimise and simulate the optimal demand for environmental inputs that maximise farm profits depending on input/output prices, available capital or labour and environmental conditions (e.g. MIDAS). In case of forest models, mathematical programming to maximise net present value of forest biomass volume or Faustmann Pressler-Ohlin model for determination of optimal rotation age maximising net present value of timber production for a forest stand are used [Kragt, 2012].

[J.J., 2007]claims that neuroeconomics is a natural extension of bioeconomics focusing also on behavioral dispositions and behavioral patterns of evolutionary processes. Neuroeconomics identifies evolved mechanisms and processes that are at work in decision-making at the neural level of the brain. [Vlasceanu, 2014] states that neuroeconomics and neuromarketing are new emerging interdisciplinary fields that offer a new vision of the decision-making process and both are established on various disciplines and have borrowed a number of methods, techniques and tools of neuroscience.; neuroeconomics is based on e.g. neuroscience, economics, mathematics, statistics and cognitive sciences and neuromarketing is based on fields such as neuroscience, economics and psychology. Neuroeconomics focuses on the activity of our brains when we are in the evaluation process of reward (decision making process about money) or fear e.g. if we calculate risks. [Neumarker, 2007] points out that neuroeconomists believe that the study of neural mechanism behind human decision-making process is essential for finding right and unique decision mechanism for the accurate prediction of behaviour and economic outcomes. Neuroeconomics rediscovers the research of the classical contributors to the economic theory of human behavior by adding and specifying important components of human behavior (many of which are ignored in standard economics), by arguing on the unity of behavioural sciences and by drawn the economist´s attention to the brain processes of human decision-making. Furthermore, neuroeconomics discover final causes of human decision-making together with bioeco-

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nomic studies. According to [Bickel, 2006], the brain function can be examined in decision making and choice by brain imaging techniques such as functional magnetic resonance imaging (fMRI) or position emission tomography (PET). These techniques determine areas of relative brain activation, and deduce the specific portions of brain used during decision making tasks in various circumstances (e.g. under uncertainty, in social situations). Functional magnetic resonance imaging is non-invasive method and it works due to different magnetic properties of oxyhemoglobin1 and deoxyhemoglobin. For example, Montague et al. examine neuronal responses associated with preferences for soft drinks by performing fMRI. Subjects are more likely to prefer Coke over Pepsi during informed testing in comparison to blind testing, and this preference is reflected in increased neuronal activation in brain regions assumed to be involved in reward. This research makes clear the neuronal underpinnings of brand effects, which can strongly influence consumer choices [Braeutigam, 2005].

"Neuromarketing is a recent interdisciplinary field which crosses traditional boundaries between neuroscience, neuroeconomics and marketing research" say [Ulman and Yildiz, 2015]. [Hubert, 2010] explains that neuromarketing is a consumer neuroscience and a sub-area of neuroeconomics that investigates marketing-relevant problems. The discipline provides better understanding of how unconscious mind processing influences the decision to purchase and it helps to understand the consumers' thoughts, emotions, feelings, needs and motivation in relation to the marketing products. Neuromarketing could also help buyers and marketing experts to understand each other better, but also to understand better the products they want, which leads to a win/win situation for both sides [Wilson, 2008]. Häusel (as cited in [Gentner, 2012]) describes the possibilities of neuromarketing as follows: Understanding of the unconscious decision-making processes and neural mechanisms; Identification of the various emotional systems in the human brain and investigation of their functions; Research of how various channels of perception can be used effectively; Analysis of the attention and cognitive processes in the brain; Optimization of text and language; Identification of certain consumer types and their better and more successful segmentation; Determination of effects of differences in thinking style, emotional structure and behavior for marketing purposes; Development of effective and efficient strategies in order to reach aging consumers. [Javor, 2013] consider neuromarketing as a term often used in the media in recent years, however, on-going debate have been focused on potential ethical aspects and the public fear of negative consequences for society, more specifically for consumers. Nevertheless, other researchers and journalists believe that neuromarketing is considered to be beneficial for consumers due to the fact that it would lead to product improvement. Therefore, authors warn that it is important to distinguish academic studies using neuroscientific methods with focus on the consumer´s point of view from commercial marketing aimed to apply findings in order to sell product. Additionally, neuromarketing research techniques (represented by electroencephalography, magnetoencephalography, functional magnetic resonance imaging, eye-tracking glasses and the galvanic-skin response) are essential for gathering valuable insights in connection with the neural substrates of emotional intelligence and allow researchers to seize short-lived interaction between different brain structures during the decision making process [Pop, 2013]. More specifically, the electroencephalography (EEG) belong to the most widespread instruments aimed to measure brainwaves´ activity and it helps to understand the way the brain responds to various stimuli, say [Pradeep, 2010]. Lewis (as cited in [Krajnovic, 2012]) considers EEG method to be the most practical, the most cost-effective and the most suitable among the currently developed methods while taking into consideration the simplicity of use and compactness of the apparatus. The functional magnetic resonance imaging measures the increase of the oxygen level in the brain's blood flow; magnetoencephalography records the magnet fields generated by the brain's electrical activity and it helps to notice changes in the brain's electrical activity; and eye tracking is aimed to observe the way the print influences the subject´s attention and cognitive processing.

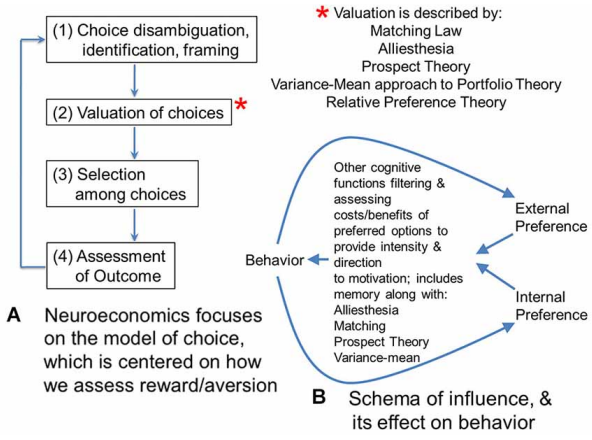

Figure 1: Comparison of neuroeconomics and neuromarketing

[Breiter, 2015]explain differences between neuroeconomics and neuromarketing. Neuroeconomics generally explains how the individuals make their choices and represents distribution of choices. There are four steps in the process of making a choice (Figure 1 (A)). On the other hand, neu-

romarketing focuses on how individuals and groups can be shifted or altered from one pattern of decisions to another pattern, or to change their distribution of choices. One potential model for the effect of influence on behaviour is shown in Figure 1 (B) where influence can be considered the difference in gradients for preference inside a person and outside a person and behaviour feeds back onto these internal and external gradients of preference as experienced utility of expressed behaviour.

4 Conclusion

The paper presented recent findings from studies of bioeconomics, neuroeconomics and neuromarketing with the emphasis on their features, techniques and models for gathering valuable outcomes. A progressive branch of social science called bioeconomics, originated from the synthesis of economics and biology, intends to explain economic events using a biological basis and vice versa. Various bioeconomic models have been developed and tested on different farming systems and under heterogeneous agro-ecological conditions e.g. bio-economic modelling of fisheries, forest and agro-economic models. Neuroeconomics is a natural extension of bioeconomics and it explains how the individuals make their choices and represents distribution of choices. On the other hand, neuromarketing focuses on how individuals and groups can be shifted from one pattern of decisions to another pattern, or to change their distribution of choices. Neuroeconomics uses brain imaging techniques such as functional magnetic resonance imaging or position emission tomography to explore brain function in decision making and choice. Electroencephalography, magnetoencephalography, functional magnetic resonance imaging, eye-tracking glasses and the galvanic-skin response belong to the neuromarketing research techniques that are essential for understanding short-lived interaction between different brain structures during the decision making process.

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Foreign Language in Development of Professional Mobility of Future Specialists

Feruza Kh. Sidikova
Senior teacher, Tashkent Branch of
Russian Economic University after
G.V. Plekhanov, Republic of
Uzbekistan

Abstract

The paper considers practical aspects of professional mobility development for students specializing in Economics by means of foreign language. It is noted that the potential of a foreign language is not used in full since training in this discipline is delivered separately with the development of professional competence of future expert. The article suggests the ways of professional mobility development by means of foreign language. '

Keywords :professional mobility; competence approach; content and language integrated learning; approach; content and language integration; continuous language education

Modern society lives in the era of rapidly developing information technologies, which creates new environment and conditions for the formation of a personality in professional field. Hence there has been an increased interest in research in such academic fields as psychology, pedagogy, sociology, foreign languages, so the level of professional and personal training of specialists, their culture and mobility should meet new demands. Nowadays a specialist is supposed to be able to sort out intensive information flows, be mobile, develop and be aware of new technologies, learn, be in search of missing knowledge and use other resources rather than simply possess particular information.

These changes dictate the necessity to use new forms of teaching foreign languages in the universities and make it important to look for new effective ways of teaching them. Scientists are more and more focused on finding effective ways of training that are to form in every student the ability of constant self-perfection in his professional activities that will allow him to respond to every change in his career flexibly and quickly. In other words, they are supposed to train competitive specialists, who are socially protected according to the quality and professional opportunities their education gives them and who are personally prepared to work in constantly changing conditions. Numerous studies of the international labor market state the fact that the training level of specialists of most common professions does not meet international standards due to the lack of particular skills and personal qualities that a specialist should have in order to be competitive in the international labor market. In many cases one of the reasons for this is the lack of language skills.

The necessity to develop a linguistic competence of a future specialist is dictated by time. High school graduates should be competitive in the labor market, and for this they must acquire not only professional but also linguistic competence, learn to adapt to the market changes flexibly, rapidly and effectively, that is to be professionally mobile. This quality of a specialist becomes particularly relevant if we bear in mind the fact that he must constantly be ready to make non-standard decisions and solve non-typical professional problems. The training of a modern specialist is significantly affected by the content, material resources, educational techniquesand appropriate level of preparedness of teaching staff of educational institutions.

Long-term observations allowed the researchers to claim that professional mobility is not formed and does not appear in the structure of the student's personality all by itself. It should be developed purposefully. In this view foreign language as a subject has a definite potential. Nowadays teachers, acting as managers of education should not only develop in their students the ability to analyze and realize their previous experiences, but also develop their skills to plan their own professional future. The provision of real professionalism and competence of a future specialist should be the purpose of university teachers, since the effectiveness and quality of higher professional education are generally defined by such indicators as graduates' employment,

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their social status, the level of portfolio and competitiveness of young professionals in the labor market.

It is well known that at present the demand for specialists with good knowledge of foreign languages has increased considerably. This is due to transformation, development of international business contacts, development of new technologiesand organization of joint ventures and intensification of professional activities in close contact with foreign specialists. Therefore it is quite on purpose that the university course of studies is professionally oriented. Its objectives are determined primarily by communicative and cognitive requirements of specialists in the particular sphere. The above mentioned is claimed in a new concept of teaching foreign languages in non-linguistic universities, where it is emphasized that a foreign language is an integral component of training a modern specialist. In order to specify this statement the State Educational Standard for higher professional education especially emphasizes the necessity for a graduate to be professionally competent both in translation of the original technical literature concerning his specialty, and in writing scientific papers in a foreign language. A university graduate “must also be able to continue his education and professional activities in a foreign language environment." The Program in foreign languages for non-linguistic universities states that "the purpose of university foreign language course is to acquire by students a communicative competence necessary for a skillful information and creative activity in different areas and situations of a business partnership".

The peculiarity of training specialists aimed to fulfill these goals is to train them in such a way that the level of their communication in a foreign language could allow them to use it to meet their professional needs, to maintain their personal businesscontacts, and to go on with their professional self-education and self-perfection. Thus, professional viability of a non-linguistic university graduate is determined in many respects by the degree of his uncomplicated and effective participation in a foreign language interactive communication, by the completeness of his involvement in intercultural communication. In other words, a university graduate should be able to use a foreign language in different constantly varying social and professional situations.

Some aspects of the students’ training for their professional competence by means of such subject as a foreign language are considered in a number of methodological papers. In particular, the researchers are interested in the problems related to the content of professionally oriented foreign language training in non-linguistic universities (N.I. Almazova, D.V. Bulatova, M.V. Ozerova, etc.), with the development of professional thinking of university students while studying a foreign language (T.V. Aldanova), with continuous professional education through a foreign language (E.A. Aliluyko), with the improvement of the professional training by means of a foreign language (S.V. Vasilieva).

The problems of improvement of training materials used for teaching a foreign language in non-linguistic universities attract great attention of researchers (T.A. Anokhina, A.R. Balayan, M.J. Beilina, V.G. Beilinson, I.L. Bim, etc.). Such interest in the creation of high-quality training and methodological support of the process of foreign language teaching is explained by the desire to improve the quality of the training of a modern specialist, capable and ready to be actively involved in the new activity and professional environment.

Therefore, the problem of creating modern, more perfect training aids in the process of restructuring the system of higher education is by right among the priorities. It is necessary to develop training aids not only in order to provide high quality and socially oriented education. They are also necessary to enhance the personal component of education and develop productive thinking to ensure the adaptability of the individual in the system of professional relations.

In spite of the fact that in methodical science there is a number of papers, directly or indirectly aimed to solve the problem of professional development, flexible adaptation to the constantly changing professional environment, this problem has not been completely solved for the present. It is quite obvious that it is through the well-organized and well-designed textbooks and training aids that professional mobility of a future specialist could be developed. Mobility as a whole and its separate qualitative components (social, pedagogical, educational, professional, etc.) is the property, which in many respects ensures the painless and effective transformation of individual manifestations in the dynamic conditions of social and professional environment (O.V. Amosova, L.V. Vershinina, O.A. Gladkaya, V.S. Stoyanov).

In general, professional mobility as a quality of a non-linguistic university graduate, the ways of its development by means of a foreign language as a subject have been beyond the sphere of interest of scientists and methodologists. Foreign language as a subject has important didactic possibilities in terms of developing professional mobility of the students of the universities. Thus, there is an obvious contradiction between the urgency of acquiring professional mobility by the graduates of economic specialties and the lack of methodical scientific research connected with revealing the specific character of formation of this personal quality in the process of mastering the foreign-language communication as well as the development of particular methods for its formation.

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The creation of training aids in foreign languages, capable of overcoming these contradictions, and implementation of educational opportunities of such subject as foreign language in order to positively affect the development of professional mobility in the process of training a future specialist will be a practical solution to this problem. We believe that this problem should be solved mostly by university teachers.

Thus, the practical importance of a training aid is due to the following factors.

- Professional mobility as a qualitative characteristic of a specialist is the ability (expressed in his skills) of an individual to rapidly and effectively respond to the changes in the professional sphere of his activities, to control and correct his actions according to the situation.
- Foreign language as a subject has important didactic possibilities in terms of developing professional competence in the process of training non-linguistic university students.
- A training aid in a foreign language can be considered as a means of developing professional mobility of students, if it meets general didactic, methodical and specific requirements: problems of the content, inter-subject integration in the selection of the problem training material, problems of methods and techniques, availability of logical recommendations (regulators) of students' activity.

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Cultural Aspects In Teaching Foreign Language

Guzal R. Abirova
Senior teacher
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

There are different assumptions about culture, and we often assume that culture is only seen as a social aspect. There is a need to become aware of what culture means for education and what teachers are doing during lessons in order to integrate this concept as part of modern language curriculum. Therefore, culture needs to be an essential part of the curriculum, at lessons and in everyday situations with students. The contact with other cultures will widen their scope and make them more receptive to changes and different views of the world and they also will become more creative. Culture can also influence on students' personal relationships, social behavior, ability to deal with conflicts and sensibility to other cultures.

Keywords :culture, communication, cross-cultural awareness, cultural differences, foreign language, foreign language teaching

Traditionally, language has been defined as a tool for communication. Obviously, people can transmit a message through other channels like body language, eye contact or some facial expression, but still language is primarily regarded as the core of communication. Learning and understanding a language encompasses not only knowledge of grammar, lexis and phonology, but also certain features and characteristics of the culture. Language cannot and does not exist apart from culture.

Many understand culture as a compound of values and beliefs shared by a community, granting its members a sense of belonging and own identity. When we teach a foreign language, we should keep in mind that each culture behaves, thinks, communicates, perceives reality, and reacts to it in a particular way. It is our duty as language teachers to create a sense of cross-cultural awareness, cultural diversity and communication across cultures among students. This will raise their understanding of how culture can influence on their learning successfully. Culture can also influence on students' personal relationships, social behavior, ability to deal with conflicts and sensibility to other cultures.

If language is taught without simultaneously teaching the culture in which it functions, meaningless symbols are taught or just symbols to which the learner attaches the wrong meaning. Simply having an acquaintance with the grammar, syntax, phonetics, and some of social conventions associated with English will not give learners real insights into the nuances of the daily lives of the people whose language they hope to speak. Increasingly, language teachers are recognizing the need to incorporate sociocultural factors into their classrooms (Palmer and Sharifian 2007); however, there is a lack of consensus on how to introduce cultural elements into the lessons.

Teachers can also help by creating and promoting awareness in the classrooms by being tolerant and respectful of different cultural identities, to familiarize students with different cultures, discuss them and develop a critical understanding. This fact alone would be a gigantic step forward towards cross-cultural awareness.

All people are members of at least one culture. Whether or not we realize it, the culture we belong to affects how we think, interact, communicate, and transmit knowledge from one generation to another. The ability to ask and answer questions based on our own culture facilitates the process of making connections across cultures. English teachers can help students activate their cultural attitude by making them aware of important elements of their own culture and helping them understand how their culture has shaped them. Kramsch calls this learning process establishing a "sphere of interculturality".

When people think of culture, they often think of artifacts such as food, clothing, music, art, or literature. Others may associate culture with conventions such as social interaction patterns, values, ideas, and attitudes. There are many definitions of culture and teachers need to define what cultural

aspects can be engaged in interactive cultural discussions.

Classroom discussions based on these considerations can foster an atmosphere that encourages students to think about their own culture and make connections across cultures while studying English.We can encourage students to construct their own notions of culture to create a "sphere of interculturality" in the classrooms instead of simply feeding them preformed information about these topics.

One way to foster curiosity and openness to English-speaking cultures is to establish a "collection" of cultural information in a variety of formats. These could include popular movies, music, literature, online sites, and everyday items like stamps, currency, musical instruments, menus, travel brochures, magazines, and newspapers from English-speaking countriesor from a specific country, depending on student needs and course goals. By offering students the chance to smell, touch, see, use, and listen to "real" things from a different culture, we can connect concepts beyond ideas and help students understand the realities of life in that culture.

Authentic materials are rich sources for a wide range of assignments and activities that heighten awareness of the target culture. Students can research the target culture and report to the class on specific elements or characteristics. They can ask questions and compare insights to identify cultural patterns and expand the entire class's general understanding of English-speaking culture. For a descriptive writing assignment, students can describe items from the collection or they can classify items by use, function, or criteria of their own choice. Meanwhile, teachers can raise students' awareness of their own culture by asking them to bring authentic materials to the class, and then, using English, describe the items and explain how they "represent" the students' culture. It is important to remember, however, that teachers need to identify specific goals they hope to achieve when incorporating culture into their lessons and use artifacts from their "collections" to create specific lesson plans to achieve their objectives.

One goal in developing cultural observation skills is to help students continually consider what constitutes culture. We want students to be able to describe how the concept of culture relates to their own experience.Why are some things in particular culture the same as ours, while others are different? Why don't all people think and act the same way? Why do we have rules, and how are they learned?

A strategy to encourage students to explore these questions and use new knowledge of a culture to simulate authentic situations is the use of role plays. Role plays get students involved interactively in a lesson to allow them to empathize with members of other cultures and practice making "mistakes" without serious consequences. Students can act out instances of breakdowns that result from misunderstandings of cultural differences. For example, students can think of ways communication may fail between people from high- and low-context cultures and invent scenarios to illustrate how problems arise. Other students in the class can observe these role plays and point out why the miscommunication took place. The class can discuss how these situations can be avoided, and students can generate solutions in a follow-up role play.

Teachers should take careful steps to prepare to examine issues that may arise in cross cultural role plays so that students gain the desired perspectives:

- Make a clear outline of the issues (possibilities include cultural behavior patterns, social and economic influences, important traditions, values that binda culture together, etc.). Keep it simple but define the specific situation and motivations.

- Try to involve all students in the process. Give as many students as possible the opportunity to play a variety of parts. Even if you can't give roles to everyone, make sure everyone is involved in pre- and post-role-play activities, asks questions, and gives feedback.

- Ask your students to "freeze" when they say or do something that you or other students find interesting and would like to give advice on or discuss.

- Get relevant feedback. Don't allow your students to criticize their classmates. You want their constructive thoughts on the situation being played out.

- Design a short checklist that encourages observers to look for key cultural elements in the role play to use in follow-up discussions. Observers must be as attentive as those involved in the role play.

The role play may or may not come to a natural conclusion. As the facilitator, the teacher can judge when to conclude the role play and put students in groups to discuss their impressions. What went well? What didn't? Were there any surprises? Did the role play elicit examples of potential cross-cultural conflict? Can these conflicts be resolved, and if so, how? After discussing the role plays, students can create their own scenarios for their classmates to act out.

From an English teaching perspective, teachers can also introduce strategies for effective communication such as turn taking, giving opinions, keeping a conversation going, disagreeing politely, persuading, and so on. These elements of communication

can vary cross-culturally, and teachers can use scenarios such as these to introduce pragmatic conventions of English-speaking cultures.

To help students critically evaluate the cultural practices and products of their own culture and those of another country, teachers can gather books, poetry, newspapers, magazines, radio clips, television shows, movies, video clips, or music or have students gather them. Students can describe the behaviors and products they read about, see, or hear, then discuss differences and similarities between their own culture and the culture they are observing.

Students can consider these questions when watching television shows, movies, or video clips:

- How and where do people live?
- How do people spend their time?
- How do people dress?
- What and how do people eat?
- What side of the road do people drive on? Do people seem to follow traffic rules?
- What gestures or superstitions did you notice?
- How do people greet one another? Do they hug? Shake hands?
- What is the polite thing to do in certain situations?

When using resources like the Internet, newspapers, magazines, and books, students can find answers to questions like these:

- What are some important family traditions?
- What issues are important to the people in this culture?
- What influences and shapes the way the people think and act?
- Is the educational system similar to that of your country?
- What roles do different genders and generations play in society?
- What is the health care system like?
- How and why do people celebrate certain holidays?

Teachers can ask students to work in groups to discuss elements of culture they observed and how people relate to each other in different societal roles. A follow-up step is to have students select a photo or video clip from their own culture, describe it, and explain what it shows about their culture. Students can also compare and contrast images or objects from their own culture and from the English-speaking culture and make presentations to the class on the cultural significance of both.

Cultural learning can be difficult to address in the English language classroom. Simple mastery of the linguistic forms of a language is not enough for learners to be considered competent in the target language. Students cannot be considered to have mastered a foreign language until they understand the cultural contexts in which the target language is spoken. While the idea of teaching culture in the EFL classroom is not new, teachers need to go beyond introducing traditional holidays, food, and folk songs of the target culture and incorporate a framework that enables students to understand the social aspects of the culture as well. Opportunities must be created for teachers and students to examine and reflect on the target culture and that of their own country. It should be remembered that the concepts discussed can be generalized to all cultures—opportunities for students to speak English may come not only with native speakers of the language but with non-native speakers of English from a variety of cultural backgrounds.

Students who may never travel outside their country or even meet an English language speaker might question why they need to study culture. However, as the world becomes more interconnected, we must help our students understand that it is more important than ever for them to be able to understand not only other cultures, but their own as well. In doing so, they will be better prepared to participate more fully in the global community of which their local community is a part. We must also stress that culture is just one of the many aspects of human behavior. We all differ from one another in a number of ways. Because of our gender, age, personality, or abilities, all human beings are unique individuals.

Certainly cultural groups share common characteristics, but we need to remind studentsthat within each group there is a wide rangeof individual differences. Incorporating theactivities discussed in this article is a strongstart to help students become more culturally aware.

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Creating Effective Language Lessons as the Most Important Issue in Achieving Good Results

Mekhriniso E. Mamaeva
Senior teacher, Tashkent Branch of
Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

In this article there explored quality among the many that characterize effective teachers-the ability to bring a creative disposition to teaching. The notion of what it means to be a good teacher is a complex one, since good teaching draws on many different qualities that teachers bring to their classes-creating effective language classes, reflecting the knowledge, skills and understanding they have built up from their professional education and from their experience of teaching.

Keywords : teaching, language lesson, a teacher's qualifications, well-qualified, creative language classes

One of the consequences of the spread of English as an international language is a growing demand at all levels in both the public and private education sectors for good English language teachers. Educational establishments want teachers who are dedicated, well-qualified, have a good command of English, who work well with their colleagues, who can engage and motivate their students and who are committed to helping their learners succeed. But above all they want individuals who are good teachers. The notion of what it means to be a good teacher is a complex one, since good teaching draws on many different qualities that teachers bring to their classes - creating effective language classes, reflecting the knowledge, skills and understanding they have built up from their professional education and from their experience of teaching.

Language teaching, like other professions, is built around standards. Standards reflect the methodology that language teachers should know, the teaching skills they should possess, and the behavior they are expected to exhibit in their classes. Most institutions would not hire someone who had a poor command of English, who had no professional training, and who dressed and behaved badly. These are not the standards expected of language teachers. Many institutions and ministries of education have official documents that describe the standards that are expected of their teachers.

Your professional skills will be reflected in many aspects of your teaching - for example, by the degree of knowledge and experience that is demonstrated in your teaching, by the extent to which your lessons reflect careful planning, and by the extent to which you control your emotions in the class. A teacher's interaction with his or her students must be respectful and appropriate at all times and should take into account each individual's age, gender, culture, and religion. Maintaining professional standards is crucial both inside and outside the class and is also reflected in your use of language and the way you dress.

A good language lesson consists of much more than a series of activities and exercises that the teacher has strung together to occupy classroom time - and it involves much more than simply presenting the material in your textbook. Language teaching is not only a field of practical activity but also a discipline that draws on a considerable body of knowledge and practice. There are long traditions of theory, research, and practical experience to support contemporary approaches to language teaching. For this reason, teachers entering this educational specialization are required to acquire professional qualifications in order to assure that they are provided with a solid understanding of their subject.

Regardless of the level of a teacher's qualifications, a good language lesson should reflect the specialized thinking and knowledge of an educated language-teaching professional. Every one of a teacher's lessons should reflect a solid understanding of the nature of language, of second-language learning and teaching, and of his or her learners - taking into account their needs as well as their learning styles and preferences.

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One of the important aspects of a successful lesson is the extent to which you are able to create a positive environment for learning. The term effective language lessons refer to ways in which you arrange both the physical and the social dimensions of the class in order to provide a supportive environment for teaching and learning. No one can teach or learn effectively if the students are noisy and do not pay attention, use disruptive behavior, and do not treat their teacher or classmates with respect. Good classroom management is a prerequisite to an effective lesson. In some classes, a very supportive and positive atmosphere is immediately recognizable: students are relaxed and focused, and work well together as a group or community. In other classes, it is evident that the students have no desire to be there and make little effort to support their teacher or classmates.

These features of a lesson have to do with the ethos or climate of the class. Achieving a positive atmosphere depends on how the teacher and the students build up a sense of rapport and mutual trust. An important aspect of effective language involves the procedures that a teacher can employ to organize student behavior, movement, and interaction in order to avoid disruptions to the flow of the lesson. When dealing with a new class, routines need to be quickly established. Experienced teachers have a repertoire of procedures at their fingertips that enable them to arrange student groups, to handle equipment and lesson procedures, and to respond to interruptions and disruptions appropriately.

Creative teachers use activities which have creative dimensions. Teaching creatively means assessing activities and materials for their potential to support creative teaching. Researchers have identified a number of dimensions of creative tasks: they are said to involve open-ended problem solving, to be adapted to the abilities of the participants, and to be carried out under constraints (Burton 2010; Lubart 1994). Some of the features that identify as productive language learning tasks can also be seen to promote creative responses:

- tasks in which learners solve problems, discover something, overcome obstacles, or find information;
- topics that students already find interesting and that they would want to read about outside of class, such as stories we find about sports and entertainment personalities we find on YouTube and the internet;
- activities that make connections to the learners' lives and concerns;
- aspects of an activity that are new or different or totally unexpected;
- tasks that concern ambiguous, problematic, paradoxical, controversial, contradictory or incongruous material stimulate curiosity;
- they look for tasks which give students a personal choice. For example students can choose their own topics to write about in an essay or choose their own topics and group members in a discussion activity;
- they don't want their students to be so worried about making mistakes that they feel reluctant to take part in activities. Reward them for effort and not only for success;
- activities that require an original response. So instead of comprehension questions after a reading passage that test recall, they seek to use tasks that encourage a personal and individual response to what the student has read; and
- activities that engage the learners' fantasy and that invite the learners to use their imagination for creating make-believe stories, identifying with fictional characters or acting out imaginary situations.

Creating effective classes means to look for new ways of doing things. Learning to teach means mastering the formats of different kinds of lessons - reading lessons, conversation lessons, listening lessons, and so on. Lessons are structured in different ways depending on their content but typically consist of openings, tasks, and closings. Delivering lessons over time, teachers develop routines and procedures that enable these dimensions of lessons to be carried out efficiently and effortlessly. But there is a tendency for teaching to become increasingly standardized - the "one size fits all" approach - particularly when teachers are working within a prescribed curriculum and teaching towards tests. This often results in a teacher working from prepacked materials such as a textbook and "transmitting" it efficiently. This is perhaps appropriate at the beginning stages of a teacher's career but should not characterize the lessons of experienced teachers. Here are some comments by a teacher on how she seeks to introduce variety into familiar activities

The teachers who deliver effective lessons have a solid knowledge base. They know their subject - English, teaching English, and learning English - and they draw on their subject matter knowledge in building creative lessons. A knowledge base is important because without knowledge, imagination cannot be productive. Creativity doesn't mean making unfocussed and unprincipled actions. It doesn't mean making it up as you go.

Teachers deal with management issues differently, depending on the kind of class they are teaching, their relationships with their students, and their own individual teaching style as well.

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Some learners look forward to their language class. Others dread going to class because they anticipate being engaged in activities that are not enjoyable, that appear to have little purpose, or that leave them feeling frustrated and/or embarrassed. As a teacher, you play a crucial role in developing a classroom atmosphere that encourages and motivates students in their learning. Perhaps you can recall the most inspiring language teachers they had as a student, and what made these teachers different and special. Among the qualities of exceptional language teachers are their enthusiasm for teaching, the high expectations they set for their learners, and the relationships they have with their students.

Expectations for student success can be achieved through praising students' performance, by giving help to weaker students when needed, and by demonstrating the belief that one teacher expressed as "Every student in my class is a winner!" Establishing and exhibiting a warm, caring attitude toward students also contributes to building a positive class atmosphere. It has been shown that students who are treated as people and not just as numbers are generally more successful learners than those in classes where learners feel anonymous. It is important for teachers to learn their students' names and show interest in them as individuals.

Creativity in teaching means having a wide repertoire of routines and strategies which teachers can call upon, as well as being ready to depart from established procedures and to use one's own solutions. In general I find that novice teachers are much less likely to be creative than experienced teachers simply because they are familiar with fewer strategies and techniques.

In this article there examined a number of factors that contribute to the effectiveness of a language lesson. Creating effective language lessons depends upon a number of factors, each of which can play a role in shaping the nature of a lesson. As we have seen here, effective teachers seek to meet high professional standards. In order to achieve this, they draw on their understanding of principles of effective teaching, they set clear outcomes for their lessons and plan their lessons carefully, they make use of strategies to manage their classes so as to facilitate successful teaching and learning, and they seek to make their learners the focus of their lessons.

Since teaching is a very personal activity and the strategies that good teachers use to create effective lessons will depend on a number of factors - such as the type of students the teacher is teaching, the class size, teacher's experience and training, and teacher's individual teaching style - there are no fixed rules and procedures for achieving successful language lessons. The key issue is the teacher's active, ongoing involvement and reflection on the processes of teaching and learning, leading to a deeper understanding of the nature of effective teaching and how it can be achieved. The issues discussed in this article will help reflect on teaching beliefs and practices as everyone engage in the process of planning and teaching effective language lessons.

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Characteristics of a Good Language Learner

Akhrorov Sohib
Samarkand State Institute of Foreign
Languages
MA student

Abstract

The article discussed about teaching and learning languages with the help of computer, multimedia assistance. From this article, you come across about virtual resource and their implementation to teaching process. As we know teaching method should be creative.We provided some examples about programs and virtual resource about how is working. In this article shows about internet learning, CALL and MALL science.

Keywords :CALL,internet,language learner, MALL

1 Introduction

There are plenty of resources for teachers and students in the internet, from file sharing to different type of software or virtual worlds. There is so much material and everything is so ephemeral that I think a present day classification could be beneficial for most of us. The rapidly advancing age of technology has made it possible to overcome many different challenges in our world today. But the benefits and versatility of technology are not as evident as it is with learning English. This is why more advocates support the integration of technology into education. The positive influence of technology when learning English is valuable and can maximize the overall experience.

E-learning is an increasingly popular area of modern education. However, when applied in language learning, the attitudes towards going on-line may differ. Many educationalists appreciate its values and see it as a wonderful resource for making the learning process more diverse and attractive. Others have an inclination to criticize the limits of e Learning. Comparing e-based language learning to traditional eye-to-eye classes does not always show the former in the more favorable light. Especially so when we believe that in language learning, speaking and communication are crucial.As technology becomes a major part in today's world, students can have more freedom and support to fully absorb the material. More students choose to learn English with computer learning assessments. Technology and learning English go hand in hand and here are some reasons why more prefer online lessons. The biggest reason for incorporating technology into education is the overall changes in global communication. What was once inaccessible can now be easily reached by way of the internet. Technology opens doors to many more opportunities by linking the world together. The olden days of limited options for education are long gone and all thanks to technological advances. Students will not only have flexibility with online schooling but also have access to more resources.

This paper was intended to discuss teaching and learning through computer and multimedia technology.

2 Discussion

Designing instruction can be a monumental task, and a model would provide a systematic structure for the process. In one development approach, Stoney and McMahon adapted Gould's model of multimedia development and identified the following four basic phases: information design including the planning of the content and an analysis of the audience, interface design which connects the learner with the content in the most functional and intuitive way possible, navigation to connect the pages of content in a logical structure, and interaction design which determines how the program works and how the learner uses the program. Alessi and Trollip also identified a four-phase model including presenting information, guiding the learner, practicing, and assessing learning.

Teaching creativity to everyone is vitally important. If teachers persist in using methods that deny creativity, the brains of the learners are conditioned in the direction of accepting traditional assumptions and content without the means to question and test for validity and reliability in today's world. There will always be a creative few who can resist

the drill and kill educational methods. But, tragically, when only a few are creative, the balance of power becomes distorted. The majority become impressionable slaves who can be convinced that their role is serve the creatively inspired experts. When this minority realizes how powerful they are, it can go to their heads. They can too easily take unfair advantage. The results include corruption, misuse of power, prejudice, scarcity, and many other unimaginable problems.

It just happens that However, I think teachers in every area need to reflect on what they are doing that tends to foster or hinder the creative critical thinking that is so essential as a survival and success skill in today's world. Creative readers, whatever they teach, will recognize their own lessons and projects in this article. In the development of cognition, the ability to imagine is among the most advanced of all human traits.

First of all, for each lesson is prepared a textual content. Most of the content is prepared having in mind the most necessary and most useful tools while working with computer. The aim of each lesson is to present a concrete procedure (step by step) for solving different situations which are decisive for improving IT skills of every learner. Next, multimedia examples are created. Presentation videos (capture screens) are multimedia objects that represent recording of the screen. Actually, each procedure that is described in the text is realized practically in the computer. Simultaneously is added sound i.e. speech that describes the whole procedure, and all together are saved in files that will later be object of links placed in the text. Animations are used to create a movement through the screen. In this system animations are used to present the starting of the application and for the creation of dynamic menus.

Multi-media development is a very creative task and every new idea to improve better presentation was tempting to the uninitiated academic who was seeking to obtain the multi-media program that will provide the excitement to engage students in their learning task. There was much enthusiasm within the project team for developing the package in the initial stages of its development. There were often detailed discussions on the scope, format and ideas on the various aspects of the package. In such a development, one can be easily enticed into new ideas and develop a desire to cover more of the subject. In this way, the project could quickly become out of control and stretched beyond its scope.

Technology tools are one way to expose children to this type of learning. Indeed, as researchers have begun to understand more about the situations in which students learn best, they have found that "the structure and resources of traditional classrooms" are often inadequate and that "technology – when used effectively – can enable ways of teaching that are much better matched to how children learn". While many studies of technology use in the classroom have reported mixed results, the largest gains seem to occur when technology tools are used to teach science and mathematics. Current multimedia technologies allow students to interact with information in new ways, change content, and even create their own visualizations. Such interactivity enables a wide variety of users to access content.

During multi-media development it is generally useful to be open minded to better ideas for presentation. However, there is a limit to how far one should go in the search for more ideas as it could affect the progress of the project and it should be remembered that there is no single correct way to present a particular scientific concept. In gathering material, the focus should therefore be on the development of an acceptable rendition of the scientific concepts that convey the message effectively and interestingly. For any extra effort beyond this, 'the law of diminishing return' applies and some other aspect of the project will have fewer resources available.

3 Conclusion

There are so many things to consider. Yet I want to keep it as brief and concise as I possible. I believe so much the world needs more and more compassionate creativity to solve the many very difficult problems confronting us. Creative people do not have answers, but they habitually wonder. They habitually ask better questions. They have optimism. When combined with empathy and compassion, creativity is bound to be a force for good.

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Morphological and Syntactical Peculiarities of Adverbial Modifier of Time in English and Uzbek in Vompa

Boltakulova Gulnoza Farrukhovna
Senior Scientific Researcher and
Teacher of Samarkand State Institute
of Foreign Languages
Uzbekistan

Abstract

The article investigates ways of expression of adverbial modifier of time and its variants in the English and Uzbek languages in comparative aspect. There is a deep analysis of the structures of adverbial modifier denoting time of action, beginning, duration and end of action in English and Uzbek language systems.

Keywords :Action, adverbial modifier of time, adverbs, beginning, duration, end, frequency, sentence structures, tense.

1 Introduction

In world linguistics the problem of adverbial modifier of time is one of the most actual but not fully investigated in the sphere of the secondary parts of speech. More often its morphological, lexical and syntactical characteristics stay apart of the viewpoint of investigation. The article was intended to investigate ways of expression of adverbial modifier of time and its variants in the English and Uzbek languages in comparative aspect.

2 Discussion

In world linguistics the problem of adverbial modifier of time is one of the most actual but not fully investigated in the sphere of the secondary parts of speech. More often its morphological, lexical and syntactical characteristics stay apart of the viewpoint of investigation. According to A.N. Baskakov it is difficult to analyze adverbial modifier of time from the grammatical point of view and it's better done from the semantic point of view. "Noun case forms denoting people and other living-beings and serving in the sentence as an object are traditionally called "object", but case forms of nouns denoting non-living beings and natural objects – are called "adverbials" [[Baskakov, 1995], p.255].

1. In Russian linguistics A.N. Gvozdev stated that "adverbial modifier of time shows different correlation to time or tense" [[Gvozdev, 1973], p.123]:

   (a) Shows the process of action

      i. The action which is done in definite time, e.g. Left in spring, rested in summer.

      ii. Covers the whole time of action, e.g. Had lived for a year in that place, but worked since April till August.

      iii. Shows the repetition of action: Comes in the morning and leaves in the evening.

   (b) Limits the time of action:

      i. The beginning of action: He worked here since last winter.

      ii. Shows the end of time of action: We were waiting for him till the evening.

      iii. Shows irrelevance of action time with its duration of time: Till the afternoon. In a week. In an hour before the lesson. Some linguists pay attention to the semantic structure of adverbial modifier. It is part of sentence which shows the action of verb, its beginning, duration and end.

In English linguistics adverbial modifier is expressed in different ways: by adverbs and noun + preposition, gerund and gerundial constructions, participle and participial constructions. R. Quirk, S. Greenboum, G. Leech, J. Svartvich and others agree to the point that time adjuncts can be divided into four main semantic classes:

- When – point of time (today); boundary of time (afterwards);
- Duration – length of time (briefly); from some preceding point in time (since);
- Frequency – definite period (daily) or number (twice); and in definite usual occurrence (usually); continuous (always); high (often); low or rare (occasionally, never);
- Other relationship (already). In the example of Uzbek language adverbial modifier of time shows action or state and answers the questions such as When? Till what time? Since what time? This type of adverbial modifier is called as adverbial modifier of time. It is mainly expressed by adverbs of time, pronouns and other parts of speech.

In the above mentioned points of views it is vivid that in the structure of simple and compound sentences adverbial modifier which expresses syntactic elements of sentences with verb and tense forms, their semantic relationships is almost not fully investigated.

- He was in prison for ten years.
- He has been in prison for ten years.

In both sentences adverbial modifier of time is expressed by for ten years, but in the first sentence the construction for ten years can be substituted by the adverb "then" because the action expressed took place in the past tense.

He was in prison for ten years – He was in prison then.

Also this sentence can be changed into compound sentence:

He was in prison for ten years but he is out now.

In the second sentence for ten years can be substituted by the adverb then because the process expressed in it is still takes place.

He has been in prison for ten years means that he is still there. In this way Leech and Svartvik point out that syntactic units expressing adverbial modifier of time can be categorized according to the tense form.

In sentence structures for denoting tense and tense forms adverbial modifier are various: for Present Indefinite Tense forms, for the planning actions, for the definite actions, different adverbial forms and syntactic units can be used.

- Tomorrow is Sunday.
- The term starts at the beginning of March.
- The match takes place on Friday.
- He retires next year.

If the adverb "then" shows past time and action in the past time, the adverbs "now" denotes the action taking place at the moment of speech or at present. In general, it doesn't matter whether it is a simple or compound sentence for denoting time, we need to emphasize interrogative word "when" because time and showing the exact time of the action is defined by interrogative pronoun "when". Besides that in the sentence structure it is important to mention about the role of prepositions, for example: at, on, in, during; while comparing them we can notice the following differences: "at" indicates the time; "on" is used with the days of week; "in" and "during" shows the length of time, e.g.:

At eleven o'clock, at 7.30, at night.

On Saturday, on the following Thursday.

In the evening, in August, in summer.

During the morning, during April, during spring.

In this order adverbial modifier can be used before the nouns with prepositions. There are definite adverbs which show direct and indirect expression of adverbial modifier of time. They can be subgrouped as follows:

- Shows the time or the period time of action:

  Again, just, now, nowadays, then, today, etc.
- Shows the time of action or contextually used adverbs:

  Afterwards, beforehand, first, formerly, late, later, lately, previously, recently, since, soon, ultimately, subsequently, etc.

In adverbial clauses it's important to state the role connective words, especially: when, as before, after, while, as soon as, once, now, that, etc. For expressing time duration such interrogative phrase as "how long" is used. In such situation the preposition "for" occupies the main position in the sentence structure: for seven days, for three years, I studied there for 5 years.

In order to show shorter duration of time instead of preposition "for" - "over" can be used:

I stayed with my aunt over weekend.

"From ... to" shows the exact beginning of the time and exact end:

I had lesson from 8 to 11.

I rested from August to October.

"While" even as a connective word is able to express duration of the action: I did my shopping while they were speaking in the street.

"Since" also can be included into the group of connective words denoting the action taken place till a definite time:

They never met since 2009.

As for the prepositions "till" and "until", they express the boundary of completion of the action:

I read a journal till 11 o'clock.

Besides for denoting action, its duration the following time and the time phrases are used:

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For ages, forever, for a moment, for a while, recently, lately, etc.

In the sentence structure for expressing adverbial modifier of time interrogative phrases "how often, how many times" show the frequency of actions and following by answering adverbs such as: regularly, normally, often, frequently, occasionally, sometimes, rarely, hardly, seldom, ever, scarcely ever and so on:

He seldom went to noisy parties.

She rarely uses washing machine.

We seldom spoke together.

I hardly moved after operation.

In Uzbek language system adverbial modifier of time shows the statement of the action by interrogative words "qachon" (when), "qachondan beri" (since what time):

Men ertalabdan beri sizga karab turubman. =

I have been waiting for you since morning.

Men ertaga sizni kurishga boraman. =

I'll visit you tomorrow.

Kilichev points out that words which show the time and can't be changed according to morphological structure are called "adverbs" [3, p. 209].

Predicative syntagma sometimes can be formed with the help of transformational method and denote time and can be used instead of adverbial modifier of time:

Feruza mevalarni taroziga kuyganda Norkuzi yutaldi. =

When Feruza was put ting fruits on the scales Horkuzi started coughing.

Timur honaga kirganda hech kim yuq edi. =

When Timur entered the room, there was nobody in the room.

In such sentences to the stem of the verb we may notice adding the suffix –da, coming with intransitive verbs and shows time. However, we can't see any adverbs of time here:

Chol qurrasiga buralayotganda (verb + suffix –da) uni allakim chakirganday buldi.

While old man turning into his hut, it seemed to him that someone called him out.

If taken generally, in both different language systems: English and Uzbek adverbial modifier of time and its semantic structure can be analyzed in different ways. In simple sentence structures in both languages adverbial modifier of time is expressed by mean of prepositions of prepositional phrases.

In adverbial clauses especially in English adverbial modifier of time is formed by relative pronouns and connective words, while in Uzbek it is formed with the help of participles and adverbs.

The ways of structuring of adverbial modifier of time also differs in both languages due to their analytical and syntactical types. English being the analytical language forms adverbial modifier by various parts of speech mostly adverbs of time coming with nous or by noun + prepositions structures.

Uzbek is a syntactical language and it includes suffixes or some ending the stems of verbs (intransitive).

It vivid in examples above. We can't convey the meaning of Uzbek sentence with adverbial modifier of time without English connective word "while".

3 Conclusion

As the result of investigation of both language groups we can conclude that in the English language system the ways of expressing time and duration of action are wider than in Uzbek, which can generalize various types of time expression by suffixes adding to the stems of the notional verbs.

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FIGURATIVE MEANING AND SEMANTIC FEATURES

Balyasnikova Marina Aleksandrovna
The Chair of Lexicology and Stylistics, Samarkand State Institute of Foreign Languages
e-mail: m_balyasnikova@inbox.ru

Abstract

The paper is dedicated to the description of the semantic structure of lexical items by means justifiable within the language system. The semantic components used to describe the semantic structure of some Russian words are undoubtedly much more relevant (linguistically) than the logical concepts used in dictionary definitions. Connotations are grafted on the system of denotations, overtly or cryptically. The aptitude and readiness of decoder to look for possible interpretations of the most unexpected concatenations of lexemes is a very important factor in bridging the gap between the finite inventory of items and rules on the one hand and the infinite number of messages on the other.

Keywords : figurative meaning, semantic features, Russian, metaphoric, natural language

1 INTRODUCTION

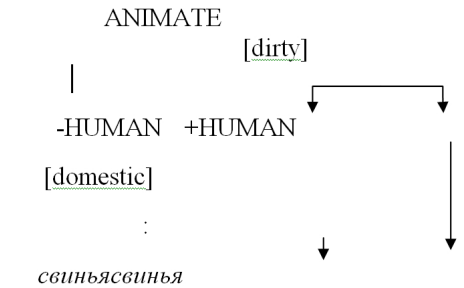
The semantic components used to describe the semantic structure of some Russian words are undoubtedly much more relevant (linguistically) than the logical concepts used in dictionary definitions. Connotations are grafted on the system of denotations, overtly or cryptically. The aptitude and readiness of decoder to look for possible interpretations of the most unexpected concatenations of lexemes is a very important factor in bridging the gap between the finite inventory of items and rules on the one hand and the infinite number of messages on the other.The aim of this paper is to draw attention to certain aspects of lexical meaning. The importance of the semantic study of so-called figurative meaning will be discussed.

2 DISCUSSION

The semantics of a natural language is based on a finite and rather limited set of semantic features and that in the present situation it is the linguist's goal to develop methods whereby the number of necessary and at the same time sufficient semantic features can be established for different (classes of) lexical items.

How can we account for the figurative (metaphoric) usage of animal names for persons? The similarity expressed in such figurative usage is very restricted, referring, as a rule, only to a single semantic feature. One may say 'fat as a pig', 'eats like a pig', 'grunts like a pig', and each time only one feature of the animal will be involved in addition, of course, to a generally deprecatory attitude. And if one chooses simply to call a person 'a pig', it will not be the pig's shape, or its curly tail, or the taste of pork that one is referring to, but only the feature of 'dirtiness'. Russian свинья*as* well as English *pig* or *swine* (but not hog),if used in the figurative, means ' dirty person'. Note that with respect to a person 'dirty' can mean either 'soiled, filthy' or 'obscene' or ' mean, immoral'. But the figurative usage of 'dirty' cannot be treated here.

Were one to follow a listener-oriented semantic theory (as the one proposed by Fodor and Katz), the semantic structure of свинья'animal' and свинья ' person' would have to be derived in the following way :



The features *animate* and *dirty* are the only common features in both usages, they could be interpreted as the ' invariant meaning' of the word. As early as 1957 J. Kurylowicz has shown that it is linguistically meaningless to set up a common denominator for both usages of a word like свинья. If the' invariant meaning' were ' dirty creature', the word свиньяwould have to be applicable to animals other than pigs e.g. to a dirty dog, which evidently is not the case.

In the following example the procedures of semantic analysis utilizing a slightly more complicated microsystem will be demonstrated.

Russian лиса (and its synonymлисица)'fox' have the following dictionary definition:" rapacious mammal of the canine family". Linguistically it is irrelevant that the fox is related to wolves, dogs and jackals. In fact, the given definition applies equally to all of them.The fact that the Russians classify a fox as зверь' beast' shows that linguistically it is a ' wild animal'. Its bushy tail is semantically relevant, since there exists a plant similar in shape and called лисийхвост *or*лисохвост, literally: 'fox tail'.

The specific reddish-brown color of the fox is one of the animal's semantic features. In German, theword *Fuchs* applies not only to the fox itself, but to a horse and a butterfly of this particular color, as well as to a red-haired person. The only Russian metaphor based on the color of the fox *is*лисичка'chantarelle', a small reddish or yellow edible mushroom. It must be stressed that suffixes, usually qualified asdiminutives or hypocoristic, are used in Russian to denote similarity in meaning to that of the underlying stem.

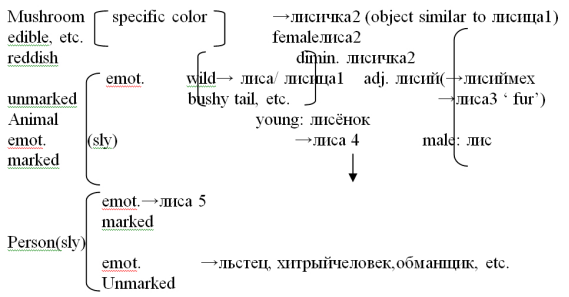
In most European languages the fox is a shrewd animal, and therefore a shrewd person may be referred to as a ' fox'. But note, for example, that in German *der Fuchs* is grammatically masculine, and hence its image in folklore is that of a swindler, an adventurer,wearing the high boots of a musketeer(cf. the *Reinecke Fuchs* of the German *Tierfabel*). In Russian the fox is feminine, and hence in Russian folk tradition the fox is a shrewd female, a gossip(кумушка,лисичка-сестричка). This leads to the image of ЛисаПатрикеевнаin the Russian fairy tale.

*Е. Курилович. Очеркиполингвистике. М.,ИЛ,1962, с. 58

In the figurative usage, therefore, the Russianлиса(лисица) is not simply a sly and cunning person, but a person who tries to achieve her or his goal through flattery or by fawning, cf. лисойприкидываться'to act like a fox,to be sly, to fawn.'

As in other languages, the word for 'fox' also means the fur of an animal. We interpret this as a result of univerbization:лисиймех 'fox fur' →лиса (лисица)3 ' fox fur'.

The semantic structure of the words connected with лиса (лисица) may be presented in the following chart :



Note that motivation of the figurative use of лисичка2 (reddish or yellow mushroom) is based on the derivation of the word лисица1, whereas the figurative meaning of лиса5 (sly person) is based on the connotation 'sly animal'.

The adduced examples were chosen to show the usefulness of an empirical semantic analysis basedon a minute observation of linguistic output rather than on logical speculations. Only elements of the object language itself, mostly nouns and adjectives, were used in the semantic interpretations.

3 CONCLUSION

We concluded that Only elements of the object language itself, mostly nouns and adjectives, were used in the semantic interpretations.

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Model of Document Similarity Measurement System by Fingerprint Method Utilization with Natural Language Processing Approach

Titin Winarti
Doctoral Program, Gunadarma
University
titin@usm.ac.id

Abstract

The practice of plagiarism is very often carried out in a community environment for example in academia. So it can be stated that plagiarism is a major concern, especially in the academic environment, where it can affect both the credibility of the institution and its ability to ensure the quality of its students. In other words, the act of plagiarism may result in a decrease of creativity in the community. This study uses a combination of fingerprint method with natural language processing (NLP) approach. With the process or plagiarism detection system can be done through various methods, such as by the method of calculation algorithms Manber the similarities using the Jaccard coefficient and K-gram method as an alternative in the detection of document similarity, is expected to allow a user to use the application this without deciding the value of gram and its window to produce an accurate similarity value. Although it has been proven NLP techniques can improve the accuracy of detection tasks, there are other challenges remain, such as multilingual detection, synonymy generalization (word sense disambiguation) and sentence structure generalization, which we plan to address in this work.

Keywords :plagiarism, natural language processing, similarities

1 Introduction

Along with the development of technology in modern times are almost instantaneous and faster and more easily exchange information recently is not only a positive impact on the advancement of technology, but also had a negative impact that is almost unavoidable one of them is plagiarism. The practice of plagiarism is very often carried out in a community environment for example in academia. So it can be stated that plagiarism is a major concern, especially in the academic environment, where it can affect both the credibility of the institution and its ability to ensure the quality of its students. In other words, the act of plagiarism may result in a decrease of creativity in the community.

Plagiarism can be considered as one of the electronic crimes, such as (computer hacking, computer viruses, spam, phishing, copyright violations and other crime-other). Plagiarism is defined as the act of taking or attempting to take or use (in whole or in part) the work of others, without reference or citation as the owner of the work. This may include a direct copy and paste, modify or change some words from the original information from the internet of books, magazines, newspapers, research, journals, personal information or ideas. Plagiarism technique is most often done by paste copy of a document.

According to the National Education Minister Regulation number 17 of 2010, plagiarism is the act of intentionally or unintentionally to obtain or attempt to obtain credit or value for a scientific work by quoting part or all of the works and / or scientific work of others who are recognized as scientific work without declaring source appropriately and adequately.

The problem, to overcome the practice of plagiarism proved persuasive way here means a straight forward approach to individuals in the community are concerned that the actions of plagiarism is not good done already proved ineffective. Document similarity measurement system is the right solution that should be done so that such fraudulent acts can be minimized. Therefore, to prevent the practice of plagiarism is required similarity level measurement system to document one's papers.

Maurer et al. (2006) suggested that one solution plagiarism commonly used is the comparison document, ie checking verbatim between documents suspected to documents made possible the source of plagiarism. Plagiarism detection is one way to

reduce the level of plagiarism.

There were many articles have analyzed the phenomenon of plagiarism and its detection[N. Beute and Winberg, 2008]. Likewise there are some software designed to detect plagiarism of documents, including Turnitin, Eve2, CopyCatchGold, WordCheck, Glatt, Moss, JPlag.Menurut Georgina Cosma et al, (2012), one of the methods to detect similarities between text documents that LSA (Latent Semantic Analysis) but these methods assess the similarity between the document text by using the frequency of occurrence of the term that it generates so that the accuracy of the assessment is still not certain when the text document being compared have the layout of the different terms that do not directly affect the meaning of a sentence in the document containing that term. It also Georgina Cosma (2008) mentions that the detection of plagiarism (plagiarism detection), LSA requires algorithms or other methods as a supplement and complement to the result of better detection.

Therefore, more research is needed for plagiarism detection methods in achieving the goal of getting the perfection of plagiarism detection method in a text document. Another method that can be used in measuring the level of similarity of the document is a document fingerprint. Compared with other methods of document fingerprint method has the advantage of measuring the degree of similarity between the documents, either all the text contained in the document or only a portion of the text alone. The advantage is to trace the characters one by one in sequence so that the character of the comparison process (calculating its hash key) is relatively simple; this method is more suitable for use in the case of the search string with a long pattern. The working principle of this method is the document fingerprint using a hashing technique. Hashing technique is a function that converts each string into a number.

Based on these problems it will be designed and analyzed a "Model Document Similarity Level Measurement System with the use of fingerprint method". The technique used in the design of the application by comparing the similarity of the original document with the document to be tested. Prior to the level measurement system similarity of this document, check the document requires a long time to have to read a hard copy. With the model of this system, a set of document files can be tested whether between documents and others are similar or not, is expected by the model of the system is the practice of plagiarism can be prevented.

As for the issues that will be discussed in this study are as follows:

1. How can utilize fingerprint method in developing the document similarity level measurement system?
2. How to build a model of document similarity level measurement system with a good degree of accuracy?
3. What percentage of document similarity which is generated by the system for document comparison?

2 Literature Review

2.1 Definition of Plagiarism

Plagiarism is taking the ideas of another person without including the name of the original author. This can be exemplified by using common points or quote some words and change them from the original article without mentioning the source article (Lancaster, 2003). Plagiarism can be considered as one of the electronic crimes, such as (computer hacking, computer viruses, spam, phishing, copyright violations and other crime-other). Plagiarism is defined as the act of taking or attempting to take or use (in whole or in part) the work of others, without reference or citation as the owner of the work. This may include a direct copy and paste, modify or change some words from the original information from the internet of books, magazines, newspapers, research, journals, personal information or ideas. Plagiarism technique is most often done by danpaste copy of a document.

According to the National Education Minister Regulation number 17 of 2010, plagiarism is the act of intentionally or unintentionally to obtain or attempt to obtain credit or value for a scientific work by quoting part or all of the works and / or scientific work of others who are recognized as scientific work without declaring source appropriately and adequately.

Type of Plagiarism

There are several types of plagiarism that is known so far, namely:

1. Word-of-word plagiarism. Copying each word directly, without change at all.
2. Plagiarism of the form of a source. Copying or rewriting the program codes without changing the structure and flow of the program.
3. Plagiarism of authorship. Acknowledges the work of others as the work itself with the name itself replaces the actual name of the author

Type of plagiarism according Utorodewo et al (2007), namely:

1. Word-for-word plagiarism. Copying each word directly, without change at all.

2. Plagirism of authorship. Acknowledges the work of others as the work itself dengancara include the name itself replaces the actual name of the author.

3. Plagiarism of ideas. Acknowledges the thoughts or ideas of others.

4. Plagiarism of sources. When a writer uses quotations from other writers without acknowledgment.

Meanwhile, According Soelistyo (2011) there are several types of plagiarism:

1. Plagiarism Word By Word (Word for word Plagiarism). The author uses the words of other writers (exactly), without citing sources.

2. Plagiarism on the source (Plagiarism of Source). The author uses the ideas of others without giving sufficient recognition (without naming its sources clearly).

3. Plagiarism Authorship (Plagiarism of Authorship). The authors acknowledge as the author of the paper work of others.

4. Self Plagiarism. Included in this type are authors published an article on more than one editorial publication and recycles papers / scientific work. What is important in the self-plagiarism is that when taking the work itself, the creation of new works produced must have a meaningful change.

2.2 Method of Plagiarism Detection

Here is an explanation of each method and plagiarism detection algorithm:

1. Comparison of the full text. This method is applied by comparing all the contents of the document, which is can be applied to a large document. This approach requires a long time but is quite effective, because the collections of comparable documents are documents that are stored on local storage. Full text comparison method can not be applied to documents that are not on the local document. The algorithm used in this method is the algorithm Brute-Force, edit distance algorithm, Boyer Moore algorithm and the algorithm lavenshtein distance.

2. Document Fingerprint. The document fingerprint is the method used to detect the accuracy of copies of documents, either all the text contained in the document or only a portion of the text alone. The working principle of this method is the document fingerprint using a hashing technique. Hashing technique is a function that converts each string into a number. For example Rabin-Karp, Winnowing and Manber.

3. Similarities Keywords. The principle of this method is to extract keywords from the document and then compared with the keywords in another document. The approach used in this method is a dot technique.

2.3 Fingerprint Documents

Fingerprinting document is a method used to detect the accuracy of copies of documents, either all the text contained in the document or only a portion of the text alone. The working principle of this method is the document fingerprinting using hashing techniques. Hashing technique is a function that converts each string into a number. In other words, yhe working principle of this method is the document fingerprinting using hashing techniques. Hashing technique is functions that converts each string into a number and then store it in a scheme or chart. The basic idea of document fingerprinting method is saving scheme or a small chart that contains a set of numbers or numbers that will be compared with the scheme or chart between the two documents. Digital fingerprinting scheme document consists of a number of positions that are marked in the document, fingerprinting algorithm which will select the sign that will be added to each position depending on the number of copies.

Algorithm of Fingerprint Method

1. Algoritma Rabin Karp. Rabin-Karp algorithm is a string searching algorithm invented by Michael Rabin and Richard Karp. It uses a hashing algorithm to find a substring in a text. Basically, the Rabin-Karp algorithm will compare the hash values of the input string and substring in the text. If it is same, then the comparison will be performed once again to the characters. If not the same, then the substring will be shifted to the right. The main key to the performance of this algorithm is efficient calculation of the hash value substring at the time shifting is done

2. Algoritma Winnowing. Winnowing algorithm is an algorithm fingerprint documents used to detect copy of the document by using a hashing technique (Schleime, et al. 2014). For hashing the document by using the k-gram, substring length k, where k is the value chosen by the user. The document will be divided into k-gram is possible and then the k-gram will be in the hash. To select a fingerprint from the results in the hash, the distribution is by using window w, and selected smallest value. \\From every window selected hash

value minimum or small. If there is a minimum value of more than one value, then select from the right window. Then save all the results that have been hash which is a fingerprint of the document.

3. Algoritma Manber. Manber algorithm is one method of fingerprint document found by Udi Manber on (Manber, 1994: 1-10). In general, the working principle of the algorithm is almost the same as the algorithm Manber with Winnowing; the difference is when the hash election scheme to be dokumenfingerprint. At this select each hash algorithm corresponding to H mod P = 0, where H is the hash value and P is the desired chunk size larger while the minimum hash algorithm Winnowing choose in each window.

4. Algoritma Jaro-Winkler Distance. Jaro-Winkler distance algorithm is a variant of Jaron distance metric that is an algorithm to measure the similarity between two strings, usually the algorithm used in the detection of duplicates (Fifit Alfiah, 2014: 3). The higher for the Jaro-Winkler distance for two strings, the more similar to that string. Jaro-Winkler distance best and suitable for use in short string comparisons such as the person's name. The normal score of 0 indicates no similarity and 1 is exactly the same. Jaro-Winkler distance algorithm has quadratic time complexity runtime complexity is very effective in the short string and can work faster than edit distance algorithm.

2.4 Natural Language Processing

Natural Language Processing (NLP) is a process of language computational modeling that allows the interaction between humans and computers with intermediaries' natural language spoken by humans. Or in other words, "Natual Language Processing (NLP) is one of the sciences of artificial intelligence which studied the communication between humans and computers.

The processing stages in NLP are described below based on Manning and Schütze. They comprise:

Tokenization

Tokenization means turning a stream of characters into a stream of tokens. This is done by removing capitals, punctuation, brackets etc. Basically each token is a word, although the definition of a word is not straightforward. A word might be defined as a string of alphanumeric characters surrounded by white space. But there are several alternatives on how to treat hyphens and apostrophes and other punctuation marks. Most punctuation marks, like commas and semicolons, are easy to remove, as they clearly are not part of any word. Periods however, are used to mark both end of sentence and abbreviations such as etc.

Stemming

Stemming aims at identifying the ground form of each word. Words may be written in different grammatical forms, but still carry the same information. During this phase affixes and other lexical components are removed from each token, and only the stem remains.

Stop Word Removal

There are many common words, like the, that and when, that do not carry any specific information and hence are not likely to be of any help in the similarity analysis. These words occur in all texts with approximately the same frequency, and do not relate to the content of text. While they are semantically important, if not removed they could disturb the similarity calculation. Most of them are prepositions, conjunctions or pronouns.

Therefore a list containing those "stop words" can be applied to the text. All words matching the stop words list are removed. Exactly what words to include on the list depends on the type of data [8]. If the texts are based on a template, it might be beneficial to remove the words that make up the template to reduce these words' impact on the similarity measure.

The Vector Space Model

The next step is to represent the words in a multidimensional vector space model. Each dimension of the space corresponds to a word. The position along each axis in this space depends on the frequency of the word occurring in the text. The similarity between two texts is then measured in terms of distances in this vector space.

2.5 Similarity Measures

The calculation of the similarity between two texts is done on the vector space model. The three most common measures are Cosine, Dice and Jaccard.

Document Similarity

Similarities between documents can be calculated using a function of the size of similarity (similarity measure). This measure allows the ranking documents according to similarity or relevance to the query. After the document was ranked, fixed number of top-scoring document is returned to the user. Alternatively, a threshold can be used to decide how many documents will be returned.

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Threshold can also be used to control the push-pull between presicion and recall. High threshold value will usually produce high precision and low recall [Krzystof J., 2007]. To determine the similarity between tested document types, there are 5 types of assessment percentage of similarity [Mutiara-Agustina, 2008]:

1. 0%: 0% test result means that both documents are completely different in terms of both the content and the overall sentence
2. <15%: 1-14% test result means that the two documents have little in common
3. 15-50%: 15-50% mean test results indicating the document including plagiarism moderate
4. > 50%: The test results of more than 51-99% means it can be said that the document is approaching plagiarism
5. 100%: 100% test result indicates that the document is plagiarism because from beginning to end have exactly the same contents.

3 Methodology

Methodology or process used to identify the similarity of the document is to use NLP techniques, where the process is as follows:

1. Tokenization, Stemming dan StopWords
2. Synonyms and Spell Checking
3. System Design

Furthermore, the document will pass through the preprocessing stage as noted previously. After that, the outcome document will go through stages processing which is using preprocess algorithm Manber. This stage is the documents stage.Level of matching is consists of parsing K-gram (breaking the word into pieces as much character k), hashing (changing the character k pieces into a hash value), and matching string (matching string hashing result) The results of the matching string then its similarity value calculated using algorithm Jaccard similarity, then the value is converted into a percentage similarity.

For more details, analysis of problems in this study using a cause-and-effect analysis in the form of a fishbone diagram. Fishbone diagram is often called a causal diagram. This diagram helps to identify, explore and illustrate the problem by including the causes and consequences of problems in visual graphics. With this diagram the process of achieving a system would be very helpful. Based on the above, the process or plagiarism detection system can be done through various methods, such as by the method of calculation algorithms Manber the similarities using the Jaccard coefficient and K-gram method as an alternative in the detection of document similarity.

The main problem of the system to be designed in this dissertation is how to create a file similarity detection system with fingerprint method with NLP approach. Below is a fishbone diagram for the analysis of problems of the system 1.

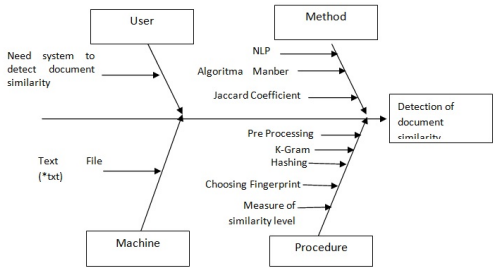

Figure 1: Fishbone Diagram for Analysis of System Problem

In the fishbone diagram figure 1, the main problem is shown in a rectangle that is most right (head) ishikawa diagram. Aspects of the quadrilateral shown to be connected to the main line (horizontal line toward the head), while the cause - effect is shown in the form of small horizontal arrows on each - each category of problems.

3.1 System Design

The design phase will decide how the system is running, in terms of hardware, software, and network infrastructure; user interfaces, forms and reports; spesific program, databases, and documents that will be required. Although most strategic decisions about the system have been made during the construction of the concept of the system during the analysis phase, the steps at the design stage determine how exactly the system will run (Dennis Alan, et.al, 2009).

Furthermore, the document will pass through the preprocessing stage as noted previously. After that, the outcome document will go through stages of processing preprocess using Manber Algorithm. This stage is the stage of matching documents. This stage consists of parsing K-gram (breaking the word into pieces as much character k), hashing (changing the character k pieces into a hash value), and stringmatching (matching string hashing result). Results matching string is then calculated using the value of its similarity Dice's Similarity Coefficient, and then the value is converted into a percentage similarity. For more details, the following figure shows the architecture of the system is done.

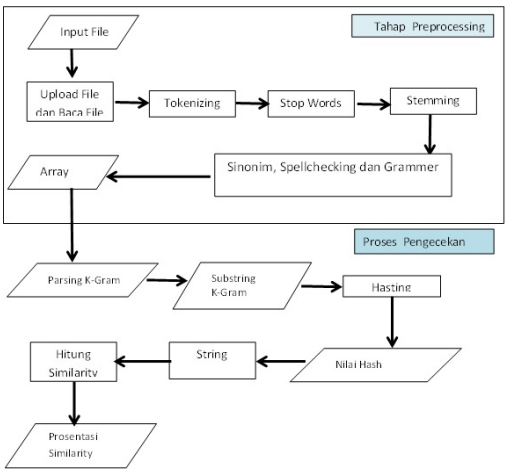

Figure 2: The system architecture

3.2 Algorithm of Document Similarity Detection

This algorithm uses some very easy steps. The step is a further stage of pre-processing the text described previously. Steps as follows:

1. Eliminating characters other than letters. Suppose there are sentence = `We use android 2.2 Froyo in recent smartphone` Then becomes: `weuseandroidfroyorecentsmartphone`

2. Calculate k – gram. Suppose there are word = `smartphone`. Will in overlapping windowing with a value of k = 3 or often called k-gram 3, the overlapping the letters into the following.

   (a) sma
   (b) mar
   (c) art
   (d) rtp
   (e) tph
   (f) pho
   (g) hon
   (h) one

3. Looking Hash value for k-gram Before doing that, should be known string conversion to ASCII. The following table of characters into ASCII from characters of: smartphones

   s = 115, m = 109, a = 97, r = 114, t = 116, p = 112, h = 104, o = 111, n = 110, e = 101

   So

   sma = 115, 109, 97

   mar = 109, 97, 114

   art = 97, 114, 116

   rtp = 114, 116, 112

   tph = 116, 112, 104

   pho = 112, 104, 111

   hon = 104, 111, 110

   one = 111, 110, 101

   For the above example, the sentence of sma has long used the character = 3a prima base b = 11 (free to use the numbers, what is important is a prime number) so that hash to the sentence k-gram of `sma`.

   115*11^2 + 109*11^1 +97*11^0 = 15211

   Then as follow:

   sma = 15211

   mar = 109*11^2 + 97*11^1 +114*11^0 = 15211

   art = 97*11^2 + 114*11^1 +116*11^0 = 13107

   rtp = 114*11^2 + 116*11^1 +112*11^0 = 15182

   tph = 116*11^2 + 112*11^1 +104*11^0 = 15372

   pho = 112*11^2 + 104*11^1 +111*11^0 = 14807

   hon = 104*11^2 + 111*11^1 +110*11^0 = 13195

   one = 111*11^2 + 110*11^1 +101*11^0 = 14742

4. Looking for fingerprint value. Fingerprint is using the following rules mod value (hash, 4) == 0. So from

   (a) sma= mod(15211, 4) = 3
   (b) mar = mod (15211,4) = 3
   (c) art = mod (13107,4) = 3
   (d) rtp = mod (15182,4) = 2 5
   (e) tph = mod (15372,4) = 0 6
   (f) pho = mod(14807,4) =3 7
   (g) hon = mod (13195,4) = 3
   (h) one = mod (14742,4) = 2

   The fingerprint is used that produces mod == 0, ie 5 with the hash value 15 372 Next will be the process of comparing or comparison between two different documents. This comparison is performed to detect whether of the two documents are similar. This comparison is done by using the similarity calculation algorithm Jaccard similarity. The following algorithm is a algorithm of document similarity calculation in this research.

   `Algorithm of Similarity Calculation`

   `Input: matriks LSI`

```
Pseudocode Jaccard Similarity

Function Jaccard_Similarity (double
VectorA [I, M], double Vector [1..N])
return similarity

Declare intersect, exclA, exclB

VectorA.unique()

VectorB.unique()

For i = 0 to VectorA size do

Intersect <- count(VectorA[i] -
VectorB[i])

exclA <- count(VectorA[i] -
VectorB[i])

exclB <- count(VectorB[i] -
VectorA[i])

end for

similarity = intersect / (intersect +
exclA + exclB) return similarity

Output :  Persentase Kemiripan
```

4 Discussion

For more details, an example of the calculation of the similarity between two documents using Manber algorithm can be seen as table1.

From result above on table1 and as stated that this paper has provided a promising framework for plagiarism detection. The main contributions are the use of new NLP approach, combined via different comparison methodologies such as fingerprint, and their integration using a machine learning algorithm. Some of the features tested can be seen as a framework for language independent detection, but our most successful implementation was based on parsing for the English and Indonesian Language.

Although it has been proven NLP techniques can improve the accuracy of detection tasks, there are other challenges remain, such as multilingual detection, synonymy generalization (word sense disambiguation) and sentence structure generalization, which we plan to address in this work.

5 Conclusion

Plagiarism prevention methods which are based on society's change of attitude against plagiarism without any doubt are the most significant means to fight against plagiarism, but implementation of these methods is a challenge for society as a whole. Education institutions need to focus on plagiarism detection methods. Analysis of widely used plagiarism detection methods shows that usually different statistical metrics are used due to their simplicity and easiness to be implemented in tools. In this paper our goal was to automatically identify plagiarised texts using NLP approach. The paper provides an insight of how NLP approach are capable of improving current plagiarism detection methodologies which is using fingerprint utilization, and also invokes further investigation on applying high-level NLP approaches to develop a better methodology.

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Table 1:

Process	Text 1	Text 2
whitespace insensitivity	we use smartphone	We use android 2.2 Froyo in recent smartphone
k-gram	-weu-eus-use-ses-esm-sma-mar-art-rtp-tph-pho-hon-one	-weu-eus-use-sea-ean-and-ndr-dro-roi-oid-fro-roy-oyo-yoi-oin-inr-nre-rec-ece-cen-ent-nts-tsm-sma-mar-art-rtp-tph-pho-hon-one
Hash	-15627-13623-15523-15141-13595-15211-14370-13107-15182-15372-14807-13915-14742	-15627-13623-15523-15123-13398-13047-14524-13465-15120-14686-13707-15136-14873-15967-14696-14029-14665-15004-13411-13200-13547-14701-15410-15211-14370-13107-15182-15372-14807-13915-14742
fingerprint	-15372	-14524-15120-12700-15136-14696-15004-13200-15372
Jaccard Coefficient	12.5	

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Gender Peculiarities of Men's and Women's Ways of Speaking

Bahrieva Nargiza Ziyaevna
Senior teachers of Samarkand State Institute of Foreign Languages, Uzbekistan

Yusupov Otabek Yakubovich
Senior teachers of Samarkand State Institute of Foreign Languages, Uzbekistan

Abstract

The article investigates gender peculiarities of men's and women's speech, usage of language and its different aspect: phonetics, morphology, grammar, stylistics, etc. The article is based on the material of gender investigations in linguistics aspect.

Keywords :gender, masculine, feminine, speech, tagging, intonation, language style, stylistic peculiarities

The idea and subject of speech are interconnected and implicated in gender construction and gender studies [Eckert and McConnell-Ginet, 2003]. Many linguists argue about positioning in speech acts relating to the gender research. For example, American linguist Robin Lakoff studied women's speech peculiarities and proposed that American women soften and attenuate their expression of opinion through such devices as:

1. using tagging questions like: "The weather is nice, isn't it?", The dress is beautiful, isn't it?, etc.;
2. using indirection, for example saying "Well, I've got a meeting with my friends then" in order to convey a reluctance to meet at some proposed time and perhaps to request that the other person propose an alternative time;
3. rising intonation on declaratives such as "When will you come?", "Seven o'clock?";
4. using euphemism in speech in order to avoid profanities by using expressions like piffle, fudge, or heck; using circumlocutions like go to the bathroom to avoid "vulgar" or tabooed expressions;
5. using various kinds of hedges like "That's kind a sad" or "it's probably dinner-time"; using boosters or amplifiers such as "I'm so glad you're here";
6. using conventional politeness, especially forms that mark respect for the addressee. There were other elements in the picture she painted of "women's language", but the main focus was on its "powerlessness", seen as deriving from the "weak" stance or position those women (and others) were assuming [Robin, 1975].

Overall, Lakoff proposed, a distinctive part of speaking "as a woman" is speaking tentatively, side stepping from making strong opinions. Women are distinguished by using "powerless" language, ways of speaking that simply are not very effective in getting others to think or do what the speaker wants them to. She was arguing that in positioning themselves as women, in taking up a certain place in the gender order, those who made use of the various resources she identified were also positioning themselves as powerless, were rejecting positions of authority from which they might successfully launch their meanings into discourse with a reasonable hope for their success.

Phoneticians point that women use longer and open sounds in creating their speech in order to make it more expressive and beautiful. They input peculiar intonation into their speech thus making big intervals between words and phrases. In comparison with women's speech, men's one is more monotonous and direct.

Reading Lakoff's work, many thought that women could be empowered by changing their modes of speech, getting more authoritative positions as speakers. Another linguist Mary Crawford explains, lots of people jumped on the "assertiveness bandwagon" during the late 1970s and the 1980s, proposing to train women to speak more assertively, to move away from the positions Lakoff had identified as constitutive of powerlessness and of "women's language." [Crawford, 1995]

But as Crawford and others have argued, such moves wrongly assume that it is deficits in individual women that explain their relative powerlessness. It is usual for women to use a lot of emotional words, "colourful" phrases, idiomatic expressions, sayings and proverb in order to "brighten" their speech. Most of stylistics devices such as metaphor, metonymy, hyperbole, epithet and others are mostly used by women who like to exaggerate, soften, compare, brighten, making unordinary the subject of their talking. Men mostly use stylistic devices when their usage becomes necessary.

Other readers of Lakoff pointed to the fact that the positioning devices she described as constitutive of "speaking as a woman'" are actually multifunctional. Many resources that she characterizes as a weak position for the speaker, a lack of force behind the main message, may do other things. A tag, for example, can both indicate a willingness to entertain alternative positions beyond that which the main clause conveys (thus, the absence of unshakeable conviction) and also serve to connect the speaker more firmly to others. Establishing such connections may ultimately strengthen a speaker's position by enlisting social support for the speaker and their ideas and projects. As we have already stressed, the multifunctionality of linguistic forms is an important theme in language and gender research of the past couple of decades. The work on tags and on intonation that can be interpreted as signaling the speaker's position with respect to the content expressed, can also position the speaker with respect to other folks: not only those directly addressed but often also overhearers or those spoken of.

Lakoff's proposals had the salutary effect of directing attention to a host of linguistic minutiae that usually are at best minimally noticed in the flow of conversational interaction. William O'Barr and Kim Atkins, for example, looked at courtroom testimony and found that speakers' overall social status as well as their familiarity with the courtroom setting better predicted use of many of these devices than speakers' sex [O'Barr and Atkins, 1980]. They suggested that what Lakoff had identified as "women's'" language really was "powerless" language in the sense of being used by those with relatively little power, but it was not necessarily gendered. They also tested Lakoff's claim that many of these linguistic strategies might render language "powerless" in the sense of rendering it ineffective. They played alternative versions of essentially the same testimony for mock jurors and found that jurors were more likely to believe that testimony if it were delivered in the more direct, less hedged, style associated with people in authority.

Speaking about men's language, Elizabeth Kuhn examined university professors' use of their authority on the first day of classes to get students to do what the professors wanted them to. Kuhn found male professors displaying more authority than women in both American and German universities but also found the differences smaller in the US than in Germany. Of course, a decade after Kuhn's study German universities still have fewer women than US universities at the highest levels in the academic hierarchy. And in both the US and Germany, men still predominate as the recognized authorities in academic and other domains [Elizabeth, 1992]. Lakoff herself did not assume that women could automatically gain power by speaking in a different style. She pointed to a "double-bind" that penalized women if they eschewed "women's language" yet prevented them from interactional effectiveness if they did indeed so speak. A. H. Gervasio and Mary Crawford found that people reacted quite negatively to women speaking as assertiveness trainers had coached them [Gervasio and Crawford, 1989]. So, men and women take different language positions in speech acts.

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Influence Factors Emergence Of Writing Skills In Early Childhood (Literature Study Review)

Warda Lisa
Faculty of Psichology, Universitas
Gunadarma

Abstract

Early childhood, period of golden development in all aspects of growth and development, physical, psychosocial, cognitive, and psychomotor social emotion. At this age, children were learning so many aspects for example developing language ability and readiness to school. It is associated with children's literacy is associated with writting and reading. Focus of this research is about the factors that influence the emergence of writting skills in early childhood (0-8 years). This research uses literature study method to examine the factors that lead to the ability to write in early childood. The result showed: there's several factors that affect the ability of writting skills in children such as family, demographics, use of instructional media, and internal factors in children. '

Keywords : early childhood development, psychology, writting skills

1 Introduction

The period of early childhood, is known as the golden age periode, at this periode children developing skills that associated with their development such psychosocial, psychophysical, cognitive and psychomotor. [Papalia, 2012]. Early childhood age limit according to some experts differage of early childhood base on some theories are from ages 0-8 years [Whitehead, 2007]), age 0 - 6 years which is divided [Papalia, 2012] into a period of infants (0-12 months), toddlers (1-3 years) and early childhood (3-6 years), Also based on [institute for literacy, 2014], early childhood had an age range of 0-6 years. The definition of early childhood, it can on this research focus of age early childhood is 0-8 years. On early childhood, one aspect of the development was to prepare for the school readiness, According to [Papalia, 2012], school readiness in early childhood development is one that must be passed in the first 6 years of age children. Covering various aspects of school readiness, physical, motor, social, emotional and cognitive. To prepare the child to maturity for entering school age, where the child began to show readiness in reading and writing. This is related to the child's development towards literacy[Weigel, 2010] sorting into three basic literacy skills: print knowledge, emergent writing, and reading interest. Base on research [Senechal, arch] the results showed clearly that a good early literacy skills help children to more easily learn to read, write and increase the success rate of children in school [Whitehurst, 1998] describes the emergen literacy is a basic literacy skills which consists of knowledge, attitudes and skills that determines further development of literacy behaviors. Literacy emergen has nine components which is, namely language, rules / regulations / habits, knowledge of letters, awareness of language elements, the suitability of phoneme-grapheme, pretending to read (Emergent reading), pretending to write (Emergent writing), motivation and cognitive skills. Study of early childhood literacy growing rapidly after Marie Clay of New Zealand in 1966 introduced the concept of emergent literacy, the behavior of pretending to read and write in young children even though they have not been able to read actually. Subsequent studies prove it turns out the development of reading and writing started early in the context of the family, before entering elementary school. Further developing emergent literacy view that states that develop in a sustainable literacy (continuum) in various ways and at different ages. It is fostered by social interaction between children and their parents or caregivers and stimulated by literacy materials such as storybooks. Thus the important role and support of parents and educators in directing the child develops from pretending to read (emergent literacy) to be able to read the actual [Rhyner, 2009]. Emergent literacy correlated with socio-emotional development in children, other factors that have a moderate correlation with the age and gender of the

child [Tan & Oates, 2013]. Another opinion says there are seven areas of literacy skills in children, which has been reviewed by CELL (Children for Early Literacy Learning, in [Dunst, 2006], relating children to domain of knowledge printing, awareness of writing, written language, understanding of the text, awareness phonological oral language and the ability to understand the hearing. The ability of children associated literacy with many aspects, not just the ability to read, but also related to the ability to write, literacy also involves multisensory. [Kuder, 2002], developing an understanding of literacy not only reading and writing, but speaking, listening imagining and seeing. Similar studies more assessing reading skills in children, is associated with; reading and picture books [Bus, 1995] motivation to read [Sonnenschein & Munsterman, 2002] phonological awareness [Layton, Deeny, Upton, Graham & Tall, 1998], Visual attention [Justice and Lankford, 2002]. In Indonesia, studies related to literacy also lebi much of the reading readiness in children (reading readyness) ([Wulan, 2009, Widyana, 2006, T, 2008]). Still very little study related writing skills in children, whereas in developing literacy skills, reading and writing are two things that can not be separated, especially as the readiness of children entering primary school. Writing skills in primary schools is one skill that emphasized its development, in addition to reading and math skills. Writing is a skill that is taught beginning in the lower class, the class I and II as learning to write at a basic level. Knowledge and abilities of students were either in writing starters are expected to improve and develop student's' writing skills at the next level. In addition, these skills are also related to the learning process of students in elementary school. Therefore, beginning writing skills are skills that must be mastered elementary school students early on. However, in reality, not all children of low grade (1 and 2) can master the skill of writing it. Difficulty learning to write often referred to as dysgraphia [Afriyanti, 2014]. In Indonesia related to the field of publishing scientific papers, writing is still relatively low productivity. Based on data Scimagojr, Journal and Country Rank 2011 [Okezone.com, 2012], Indonesia ranks 65 with number 12 871 publications. The position of Indonesia under Kenya with 12 884 publications. American was ranked first, with 5,285,514 publication. Indonesia is still inferior to Singapore in position 32 with 108 522 publications. If viewed from the perspective of research publications ratio to population, the percentage is still low. In the context of literacy, the ability to read and write is a concept of mutual support. According [Eliason, 1994], a good reader would be a good writer too. Writing is one of the growing capabilities as the development of children's language, because human life besides there are oral communication, there is also a written communication. This writing is closely linked with the activity of reading. According [Hohman, 1995], writing skills in children is a stage in improving oral language skills in the emergence of skills in all forms. There are several stages of the development of writing [Hurst, Dobson, Chow, Munich, Stickley and Smith, 1983]: Precommunicative Stages, Stages Semi-phonetic, Phonetic Stages, Stages Transitional. [Brown, 1990], there are four writing items, namely: Pre communicative writing. Semphonic writing. Phonic writing. Trantitional writing. According [Santrock, 2011], children start writing begins with strike activities streak (scribbing) around the age of 2 years or 3 years. Developing their motor skills such that they begin to be able to write letters early childhood. At the age of 4 years they've been able to write the name of their names. At the age of 5 years can rewrite the letters they see and imitate wrote a few short words. They will gradually be able to distinguish the hallmark of letters like the letter V, S, T, etc. Another activity is when they try to write technique using curves and lines as letters, imitate or emulate the writing letters can be known, write the name of his own, write a few words or short phrases, write phrases or sentences varied. Factors that affect the child's ability to write to the relevant aspects of fine motor skills, hand-eye coordination and how to hold writing utensils, basic way of writing letters and language perception print, as stated Lamme in [Claudia, 1992], six skill areas prequisites for hand writing; small muscle development, eye hand coordination, leading a writing tool, basic shredder, strakes, letter perception, and orientation to prited language. Writing in kindergarten by [Scope, 1992], called the writing of early or write early. Early writing activities include children try writing techniques using curves and lines as letters, imitate or mimic writing letters can be known, write the name of his own, write a few words or short phrases, write phrases or sentences varied.

2 Methods

This study uses literature study to explain the factors that can affect the appearance of writing skills in children. Literature method is a method of data collection by taking the necessary data from the literature related [Zed, 2008]. Literature study The technique used by way of data collection techniques through study of the review of the books, literturliterature, records, and reports that had to do with the problem being solved [M., 2005]. In this research, the literature study include data theories from, books, result scientific from journal.

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3 Result & Discussion

Based on the latest assessment of the capability of writing in early childhood, writing skills in children appear at ages ranging from 0-8 years [Whitehead, 2007]. There are many factors that can contribute to a child's success related to writing skills, one of which is the influence from parents who consistently [Senechal, arch]. According to [Bennett, 2002], the family can serve as educators who have a significant correlation to children's language and literacy skills. It is also in line with [Stephenson, 2008], teaching parents about the sound, name letters and words correlated with the basic literacy skills of children. Paratore (in [Reutzel, 2006]) parents contribute very strongly to children's success in learning literacy. Results of the 2006 PIRLS study in the 45 countries studied, showed that children from an early age will acquire literacy skills early stimulation of their families may have a higher literacy skills in the next development period [Mulis, 2008]. So the role of the family, especially parents to be important, according Vgotsky opinion (in [Langford, 2005]), tasks in the study should be planned and challenged by parents or caregivers, the process of interaction with parents when children learn these important things. [DeBarsyshe, 2000]believes that the home environment is a very important part for the development of children's skills, this is because a child has the advantage of being at home can be a place that is very close to child-related material literacy, eg family activities associated with engagement interaction in reading activities, children also learn to observe other people's literacy activities in the home. Family, especially parents, are the major contributing factors that make children stimulated to raise literacy skills, particularly writing skills beginning in early childhood, for example by creating activities that support children in developing literacy. [Weigel, 2010] Activity parent-child literacy as a mediator between dependent and independent variables. This study began to see the family as an asset to improving early literacy skill to children. Several factors related to family lainjuga correlated with writing skills in children, namely, family routines ([Churchill, 2004]; [Johnson, 2008]; [Serpell, Sonnenschein, Baker, Ganapathy, 2002];[Weigel, 2010]), the belief held people parents about the proper way to help children learn to read and write [Bennett, 2002]. Factors home environment is also a factor affecting the ability to write for children. The study states that the home literacy activities correlated to the ability of early childhood literacy. Research with an experimental method of the literacy skills of early childhood, do more to lead to intervention literacy relatives or parents in creating activities literacy families with the goal of improving the literacy skills of child related reading and writing ([Cronan, Cruz, Arriaga & Sarkin, 1996]; [Graham, Harris, & Fink, 2000]; [Martin & Silva, 2006]; [Saint-Laurant & Giasson, 2005]; [Rasinski & Stevenson, 2005]). Predictor for activity literacy beginning in the home, such beliefs / values of parents ([Lynch, Anderson, Anderson, & Shapiro, 2006]; [Baker, 1999]) , family routines [Churchill, 2004]; [Baker, 1999]). Involvement of parents, are parents participate in a child's learning and provide caregivers and parents are the first educators for children, has an active role in educating children in their first years. Parents will stimulate and challenge the child in various ways, for example to teach children how to write a systematic, reading to children in a way to share books, singing, storytelling, play and invite children joking together. Some parents also teach a second language (Bilingual), the results of the research, said that not affected the cultural and social economic status of parents [David et al, 2000]; [Whitehead, 2007]. Environmental activities of literacy children at home, can not be formed by itself, it is supported by the involvement of parents in creating an environment of literacy, such as the results of research [Ruhaena., 2014], examines the determinants literacy skills base in the context of the family, parents involvement in shaping early literacy in children, one of them by making interaction in child literacy activities at home, but the research results HLE can not make the factors that mediate between family factors and the literacy skills of children in the Central Java. This can be explained with the opinion of [Baker, Sonnenchein, Serpell, Fernandez-Fein & Scher, 1994] which identifies the characteristics and experience of the core in developing the activity of literacy in the home, the child's experience is not limited to the book or printed material other, but the experience could obtained also through oral language in the home environment. List of experiences in the home that are important include: Books for children are easily accessible; The availability of print material at home in large numbers, including books, magazines and newspapers owned by the parents; Children read regularly; Exposing children when parents read regularly; the availability of space for the children to read, parents are willing to guide and provide impetus for the child when reading. Based on this, it can be explained to form the child's ability related to literacy in reading and writing, children's experiences at home can not be separated from the material availability literacy at home, problems in Indonesia related to infrastructure and differences in economic status diverse social or demographic factors also play an important role in writing skills in children. Socio-economic status, including one demographic factors affecting literacy skills related to writing skills in children. The second demographic factors is the level of literacy in the mother, a third

tool to teach literacy at home, and the role of the mother [Aram, 2001] Demographic factors are considered as well as determinants and support in creating an atmosphere of literacy, especially writing skills in children, such as mother's education as a caregiver in the family, are very influential in assisting the child reaches his writing skills, for example, according to [Pianta, 2008], giving precise instructions have relationships against the literacy skills of children, is related to how the role and the mother's education level. The use of teaching literacy in children early proved to contribute to all aspects of emergen literacy, in addition to the quality of the role of women in the socio-economic status. The role of the mother is a factor that is able to predict the ability to write words, metacognition and phonological awareness in children in the next stage of development [Aram, 2001]). The use of media is also becoming a factor in treatment three weeks of learning, recognition we ran two tests, one week apart, letter recognition to compare the performances of the two groups. The results Showed that in the older children, the handwriting training Gave rise to a better letter recognition than the typing training [Longcamp, 2005] Development of instructional media in the past studies, leading to the use of touch screen technology. According to the [institute for literacy, 2014], the use of touch screen technology is believed to be the key to helping children in learning to read. Person [institute for literacy, 2014] found that use of the touch screen has the advantage that its impact is seen in the two groups based lowest number of groups in reading that children from low-income families. The iPad applications were targeted to ensure that timely and accurate use required the students to use precise finger placement, movement, speed and control, all requirements for children's occupational tasks. iPad applications as an engaging way to develop fine motor skills. Caution however needs to be taken when generalising and explaining the role of iPads and applications as these were targeted and carefully selected. There is however evidence for the role iPad applications in school and therapy settings to assist children in the development of their fine motor skills [Axford, 2015]. Poor handwriting may be related to intrinsic factors, which refer to the child's actual handwriting capabilities, or extrinsic factors which are related to environmental or biomechanical components, or both. It is important that handwriting performance be evaluated using a valid, reliable, standardized tool combined with informal classroom observation and teacher consultation [Feder, 2007]. [Kulp., 1999], visual motor abilities have a relationship with performma related academic writing skills in preschool age children. [Bart, 2007], the motor skills of children as one of the factors that can predict school adjustment in kindergarten. Treatment varies According to the causes of non-proficient handwriting, the which can result from Inappropriate extrinsic factors such as biomechanical or environmental components [Rosenblum, 2006] and or from intrinsic factors such as poor performance in perceptual and the motor skills [Feder, 2007]. The relationship between perceptual-motor skills and handwriting has been investigated from two different but complementary theoretical frameworks: (1) the developmental perspective with regard to the question of readiness for handwriting [Berry, 1989] or to the identification of Difficulties of handwriting and (2) the hierarchical models of the motor control wherein the visual and kinesthetic feedback information is required to perform handwriting ([Maeland, 1992];[Smits-Engelsman B. C., 2001])

4 Conclusion

Based on disscussion we can concluded if the factor that influence. The emergence of writing skill in early childhood are ability to write the study results of previous research, many examine family factors and parenting as a major factor in shaping the writing skills in children, support parents, custom made orangtu until confidence ofparents in creating an environment activity literacy home, providing material means literacy in children, is considered as an important factor that many correlated with factors that can raise the literacy skills of child related skills in writing, in addition to demographic factors and infrastructure tools child's learning, the current direction of recent research has been moving towards the use of tablet computers as a means to stimulate the writing skills in children, and also as an assessment tool in children's writing skills. In addition to internal factors in children is also very influential, such as visual and motor coordination ability, sosioemosi, motivation and cognition.

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Methods of Assessment And Classification of Risks In Small Business Entities

Ikramov Murat Akramovich
Professor and Doctor of Economics
Tashkent State University of Economics

Eshmatov Sanjar Azimkulovich
Assistant
Tashkent State University of Economics

Abstract

The article presents the classification of risk assessment methods that enables improvement of risk interaction in small scale and private business entities. The methods of risk analysis in small business entities depend on the scale of the project. The methods of risk analysis in small business entities depend on the scale of the project. Large projects require a thorough risk analysis using the apparatus of the theory of probability, and for smaller projects risk analysis with expert methods is enough.

Keywords : Risks, small business entities, risk analysis

The article addresses issues of assessment and effective use of the existing risks in the activities of small business entities. The article presents the classification of risk assessment methods that enables improvement of risk interaction in small scale and private business entities.

Production activity is more risky than, for example, services. Risk - is an economic category, which on the one hand expresses the ambiguity of the outcome of the planned project and, on the other hand, reflects the degree of success of the entrepreneur.

Methods of estimation, forecasting and risk management in domestic entities of small and private businesses are insufficiently worked out. Furthermore, their activity is often associated with such level of risk at which the Western entrepreneurs in general would refuse doing business.

The methods of risk analysis in small business entities depend on the scale of the project. Large projects require a thorough risk analysis using the apparatus of the theory of probability, and for smaller projects risk analysis with expert methods is enough. The following methods are used in risk assessment:

1. Qualitative assessment of the probability and strength of risk allows to roughly estimating the determinants of the risk using an ordinal scale. This method does not allow to estimate the absolute amount of risk. With this method risks could be weighted to determine needs in respond. Risk assessment is formed by multiplying risk determinants, which can vary from 1 to 9.

2. Quantitative assessment of the probability and strength of risk is more time-consuming than the qualitative one. However, it enables to get the absolute value of the determinants of risk.

3. The method of delineating risk contours (Equi-Risk-Contour) is developed by NASA and adapted to the economic science. Moreover, wither method could be done followings: defining risk classes (expenses);construction of structural diagram; setting boundaries of damages; risk application; interpretation of results.

4. Risk interaction analysis. The method is based on network and matrix of interaction. In classification of risks it is reasonable to carry out the method in following order:

   - Formation of a network of interaction
   - Formation of a matrix of interaction
   - Relations estimation
   - Calculations of outcome

5. Risk sensitivity analysis. The method isused in the deterministic model which reveals the influence of individual variables on the overall result. Sensitivity analysis is not applied for quantative assessment of separate risks, it checks sensitivity of system to risks. For instance, if aggregate demand is generated from individual risks, it is possible to determine which of these risks has the greatest impact on the demand.

Table 1: Comparative analysis of risk classification methods with Specifics of small business

Indicator	Portfolio risk analysis	ABC-analysis	Method of delineating risk contours ERC	Risk interaction analysis	Risk sensitivity analysis
Classification	On basis of integers from 1 to 3; every risk is character-ized by concrete numbers	Every risk is character-ized by concrete numbers	Every risk is character-ized by concrete numbers	On basis of interrelation and influence	On basis of influence of individual variable changing in aggregate risk.
Advantages	Clear presentation of results (clear results); with regard of both risk determi-nants; description of estimated intervals with concrete numbers.	Clear presentation of results (clear results)	Clear presentation of results (clear results); with regard of both risk determi-nants; description of estimated intervals with concrete numbers.	Risks are not considered separately from each other; Suitable mainly for projects which require a lot of technology	Clear view of individual risk's impact on aggregate risk
Disadvantages	Approximate analysis of risks	Information loss		Expected risk expenses are not considered	Is not suitable in case of summary-zing individual risks
Indicator	Portfolio risk analysis	ABC-analysis	Method of delineating risk contours ERC	Risk interaction analysis	Risk sensitivity analysis
Specific of small en-trepreneur-ship	Method is appropriate on the strength of high rate of ambiguity of business environment	Difficulties in analyzing due to huge amount of hardly estimating factors	Highly realizable due to simplicity of determining losses in en-trepreneur-shi	Highly applicable in small production en-trepreneur-ship	Complexity of practical realization

The above-mentioned methods of risk classification are summarized and presented in a one scheme (see. Table 1), where you can trace the influence of the specifics of small businesses in various classification systems.

At a meeting of the Cabinet of Ministers dedicated to the results of 2014 and the most important priorities of economic program for 2015 was noted the elimination of all obstacles and limitations, providing complete freedom to the development of private property and private enterprise. From our point of view, the given methods for assessing the risks in all types of economic activities help to justify theoretically possibilities to avoid unnecessary costs, efficient use of investments. In Figure 1 we give graphic interpretation of risk interaction.

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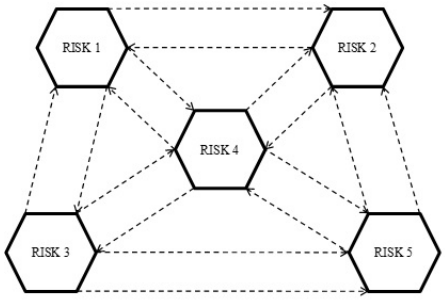

Figure 1: Graphic interpretation of risk interaction

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The Significance of Innovative Development of Economics Through Digital Marketing in Uzbekistan

L.T. Abdukhalilova
Associate Prof., Tashkent State University of Economics

I.Dj. Sokhibov
Graduate School student,Tashkent State University of Economics

Abstract

Digital Marketing is fast gaining popularity over traditional marketing due to enhanced level of speed, efficiency, cost effectiveness and greater focus on customer. Consumers and businesses are increasingly shifting their attention from traditional marketing media like television, radio and print publications to digital marketing like Internet, wireless devices and social media channels.

Keywords :Digital Marketing & Traditional Marketing, Social Media Tools, Search Engine Optimization, Pay Per Click, Social Media Marketing, Digital Innovation, Digital Marketing Channels, Digital Marketing Strategies

Coming to the 21 ^ st century, developments in technology and the evolution of digital marketing are closely united. There have been major breakthroughs in technology such as radio, television, internet, mobile devices and applications that ultimately altered the relationships between marketers and consumers for ever and did soon a global scale. But, of course, digital marketing is not actually about technology at all, on the contrary, it is all about people. In that sense it's similar to traditional marketing. It's about people (marketers) connecting with other people (consumers) to build relationships and ultimately drive sales.

Digital marketing is the use of digital sources like Internet, digital media as radio, television, mobile phones and digital display advertising for promotion of products and brands to consumers. Digital marketing is the practice of promoting products and services using database-driven online distribution channels so as to reach consumers in a timely, personal, relevant and cost-effective manner. Marketing concept is undergoing a shift from the exchange of goods to interactivity, services, connectivity, and ongoing relationships. This shift is facilitated by technological innovations, changing media environments and new channels which are making small business sectors to search and implement ways to attract potential customers. Digital Marketing uses different digital marketing channels such as video channels, banner ads on affiliate websites, cell phone short message service (SMS) text messages, voice broadcast, really simple syndication (RSS) feeds, outdoor digital displays, websites, blogs, broadcasts and etc. Besides, it has several techniques such as search engine optimization (SEO), pay per click (PPC), and social media marketing (SMM) and paid inclusion. Search engine optimization improves website or webpage appearance in search engines through "un-paid or natural" search results. Social media marketing makes use of online communities, social networks, blogs and online channels like Facebook, Twitter, Google+, YouTube, LinkedIn for marketing and sale activities.

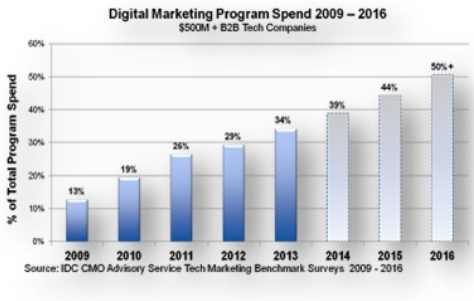

Figure 1: Digital Marketing Program Spend 2009-2016

According to IDC's CMO Advisory Service,from 2009 to the end of 2013 digital marketing program spend increased from 13% to 34% of the total marketing program mix. For 2014 IDC's CMO Advisory Service expects this to increase to 39% and to 50% in 2016 respectively[IDC,]. In addition, digital marketing averages 2.5% of company revenue and 25% of overall marketing expenses according to Gartner. Google's own research says that 94% of smartphone users search for local info, 51% visit the store they searched for and 29% of them make a purchase online. A new report by Forrester

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Research forecast says that interactive marketing spend will reach $76.6 billion by 2016 as an example of US[For,]. Search marketing which is considered as one of the core digital channels of digital marketing will continue to be the biggest piece of the interactive spending pie rising from $18.8 billion to $33.3 billion between 2011 and 2016.

If we glance at the condition of digital marketing in Uzbekistan,there are 213600 small business sectors running their businesses in various fields. This number shows that the time has come for small business sectors to drive their sales by digital marketing opportunities. Digital marketing can be applied in variety of business fields such as hypermarkets (Makro), supermarkets (Mega Planet), online trading shops (Torg.uz), online retail shops (Korzinka.uz), tech companies (Artel, Roison), telecommunication companies (Beeline, Ucell), tourism, banking and etc. We can currently observe four top priority problems in Uzbekistan with digital marketing such as commerce experiences (Torg.uz), social marketing (Artel), content management (Makro) and mobile marketing (Korzinka).

If we look through some statistics, according to UzReport,more than 10 million people access internet regularly in Uzbekistan[uzr,]. And, here comes the best part; the internet users as of now comprise of only 33.6% of the population. Now you can imagine the scope of internet marketing in Uzbekistan as an example of Korzinka.uz and Torg.uz since both companies provide an online shopping service for consumers. In addition to the statistics of online free ads social website calledTorg.uz, about 5% of visits to Torg.uz are referred by search engines. It shows that the site has been sufficiently recognized by local users (94.2%)[ale,] which can be a sufficient cause to enhance the digital marketing within the country. Another survey statistics indicate that 659175 people weekly visit Korzinka supermarkets in Tashkent. This number can be doubled or even tripled in a short time by the implementation of the digital marketing ways such as enhancing commerce experience and mobile marketing, and etc.

To sum up, with the advent of digital marketing the scope and prospects of profit reaping has increased for enterprises to a great extent but still it lacks strong customer loyalty as from the buyer's viewpoint, the inability of shoppers to touch, to smell, to taste, and to try on tangible goods before making an online purchase can be a limit of digital marketing over traditional marketing. The theoretical understandings of why and how to use different digital marketing channels in innovative development of economics is still under development process. At the end of my words, I would like to recommend these four keys which make digital marketing success in Uzbekistan enterprises as follows:

1. Manage complex customer relationships across a variety of channels – both digital and traditional by enhancing corporate website and social marketing 2. Respond to and initiate dynamic customer interactions through mobile, email and internet marketing 3. Extract value from big data to make better decisions faster. 4. Increase in geo-targeting and location-based services.

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Calculation of Efficiency of Tourism Management

Abbas T. Shermukhamedov
Doctorphysical and mathematical
sciences, professor, Tashkent Branch
of Russian Economic University after
G.V. Plekhanov
Republic of Uzbekistan

Abstract

It is known that tourism directly influences on social, cultural, educational, economic spheres of a state and also its international and economic relations and thus there is a necessity to research tourism management and specify its efficiency. In the article there given estimation of efficiency of tourism management that allows influencing actively on current condition and tendencies of development of tourist firms, establish their sizes, trace and correct uncontrollable phenomena and processes, constitute forecasts and plans of development of these firms and their structural divisions.

Keywords :tourism management, tourist firms, tourist product, tourist activity

Proceeding from specificity of tourist activity, it is necessary to represent accurately that it is essential to measure and calculate its efficiency. After all the effect from tourism is determined either by quantity of tourists-visitors, or volume of activity of commercial tourist structures producing specific tourist product.

But it is necessary to take into account that mechanic transfer of well-known techniques of determination of efficiency from other industries of economy is not meaningful.

As tourism covers a wide range of types of activity and is beyond traditional representation about it as a phenomenon it is connected only with others than effect from it should be considered from the point of view not only demand of special type of consumption but also as an offer. Management efficiency calculation in tourism sphere cannot be defined by traditional method of determination of management efficiency which is used in companies and engaged in production of goods and services. Tourist activity is determined not by character of produced goods (service), but features and quantity of consumers of tourist product. It means that the effect in tourist industry depends not only on final consumption of its any product, but mostly on consumer type.

Any expenses in tourism influence directly on efficiency of functioning industry and consequently tourist expenses represent main component founded as a principle of tourism management. It is used for supervision and estimation of tourism impact on national economy and various sectors of tourist industry. Efficiency in tourist sphere should be understood as a ratio of result and purposes of tourist services, or their result and costs for its reception. Understanding the efficiency oftourism management is based on such initial position. It concernseffective work of all subsystems unitedby term “tourism” that in market economy provides managing system. In this connection the efficiency of tourism managementshould beunderstoodas management which will provide successful functioning and developing each organizational and economic link in this industry? We analyze and determine efficiency of tourism management in two directions: economic and social.

International entrance visitors for each country is a welfare as they stimulate development of national and local economy, provide inflow of foreign exchange and help financingconstruction of objects which all citizens can use. Measurement of tourists’ expenses will allow estimating economic influence of tourism on national and local level. Studying incomes of the country from internal and exit tourism is also important.

Maximum increase of contribution of tourism in general economic welfare of citizens is an important strategic aim of both developed and developing countries. By means of management it is possible to increase pure economic benefits from tourist activity, i.e. to provide excess of economic results over costs connected with tourism functioning. In order to receive full picture of influence of tourism on national economy, we offer to consider consecutive tasks, namely, to measure total contribution of

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tourism to national economy, i.e. learn "total economic gains" from it, specify gross economic costs from tourist activity, establish pure economic contribution of tourism to national economy and reveal reserves increasing size of this contribution. But in order tosolve these tasks it is necessary to specify indicators, which are more significant for management, for example, personal income of citizens. Tourism has direct influence on monetary income of citizens, providing their employment in firms, at enterprises and organizations. Population employment is closely connected with this conceptexpressed by quantity of workplaces for full time or part time working day, commercial incomes are total monetary receipts formed thanks to expenses of tourists.

Net profits are indicator of firms' viability of serves tourists. They create means for capital investments and show efficiency of servicing tourists by this or that firm, public revenues that is connected with currency receipt in state treasury, formed as a result of tourist activity. There are taxes and tax levies here. Besides, there are state objects which directly serve touristsin a number of countries. They are places of tourists'distribution, entertaining institutions and even shops. Receipts from sale of goods and services on these objects are considered as public revenues, gross domestic product (GDP) which is also formed from tourist activity in the country. Tourist services and their influence on management of tourist organization are in direct dependence on its specificity and features.

A majority of tourist enterprises is not large. Large tourist enterprises are created only in densely populated areas, they are typical for tourist industry, but it is not factory shop with one type of organizational structure of management. There are many tourist enterprises and organizations in tourist industry with one type which, anyhow should be entered in uniform regional control system where there is an aim to provide long capacity and competitiveness in the market. Accurate and estimated purposes such as accumulating values, cash flow, profit and others are characteristic to manage private tourist enterprises which in their activity are guided by makinga profit. It is very difficult to predict precisely all phenomena and processes occurring in tourism (political conditions have changed, environmental conditions have sharply worsened, taxation system has changed and become complicated).

The following feature of tourism is stronglyconnected with interested clientele. Each tourist enterprise performs its activity among various interested people and clients. Tourist organizations work with a considerable quantity of interested people who make strong impact on organization. As tourist product is shown as a service which necessary sign is presence of client and impossibility of warehousing this service because there amplifies personal aspectat realization of tourist product, process of granting tourist services can be automated in ready smaller degree, than, for example, process of production of goods.

After all it is impossible to predict behavior of tourist - it depends not only on objective circumstances, but also on subjective factors. For this reason in tourism management a great attention should be paid to human resource management and adjustment of interpersonal relations.

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Management and Its Components in Tourism Industry of Uzbekistan

Nodira A. Khodjaeva PhD
Associate professor Tashkent Institute of Railway Transport Engineers, Republic of Uzbekistan

Aijan B. Jumanova PhD
Associate professor Tashkent Institute of Railway Transport Engineers, Republic of Uzbekistan

Abstract

For individual, tourism is a popular leisure activity. for a city/country tourism has become economy driver. The objective of this paper is to discuss management and its components in tourism activity in Uzbekistan, as these elements affect competitiveness of tourism organizations. '

Keywords :tourism, management of tourism industry, elements of tourism products

1 Introduction

Many countries depend on tourism as economy driver. Tourism can be domestic or international. International tourism has both incoming and outgoing implications on a country's balance of payments. The concern generally related to increase revenue from tourism. To be successful on tourism business someone should concern with management. As for individual, tourism is a leisure activity, management should work for tourits experience. This paper was intended to discuss tourism management in Uzbekistan.

2 Discussion

Tourism as a control object has a number of which are features inherent only to it that are largely due to the specifics of the industry. The task of management is to detect such features in the future to include them in the management of tourism enterprises and organizations. The first feature of tourism in terms of management is a large scale of tourism industry and the complexity of the relationships between its components. The second feature of tourism as an object of control can be considered conflicting and complex definition of objectives of administrative influence. At first glance it may seem that private tourism enterprises targets are clear enough, they are accumulation values, profit earning. However, travel companies often guided by the statement, and not on the actual needs of tourists. To reveal the least, a manager must endeavor, as ineffectiveness of his activities may provoke dissatisfaction of a consumer. It is rather difficult to define clear objectives and criteria for tourist organizations of national, regional, local (city, district) levels, which hampers an objective assessment of their contribution to the development of tourism, forecast and planning activities of such organizations. More complex is a development of individual tourist areas, regions. It is not easy to accurately predict all phenomena and processes occurring in tourism (the changes in the political situation, deteriorating weather conditions, changes in the tax system, etc.), so they often can speak only about the probabilistic nature of forecasts and plans. Thus, tourism is a phenomenon that is difficult to predict and measure. One of the most important features of tourism as a control object is specificity of tourism services and tourism product. They must be considered when designing the system management of tourism enterprises, organizations and territories, in establishing service standards, staff training, etc. Specific requirements for the management district tourism bring and specificity of tourist demand, which has a heterogeneous character and stands out among other reasons:

- intangibility and preservation of tourism products;
- diversity of consumer preferences;
- high importance of social factors.

On the management of tourism sector, and this affects its feature as a service in the complex during the stay of tourists on holiday. It is this complex is the basis of the tourist demand. Depending on the customers to the forefront can leave this or that service. Tourism products created by the efforts of many organizations are independent of each other.

As a result, it increases the value of cooperation both horizontally and vertically, which facilitates services fall in the complex. Under the influence of a number of objective and subjective factors: climatic, economic, social (free time), demographic, psychological (traditions, fashion), logistical (the development of a network of institutions of accommodation, food, transport, etc.).. There formed seasonality of tourism supply and demand. All of these factors, especially climatic conditions determine seasonal fluctuations in demand for tourist services. Their accounting must be the manager of travel agencies to develop a proposal and take action to reduce unevenness in demand for tourist services. Another feature of tourism is the fact that its development affects a much larger number of stakeholders than in any other human activity. Wednesday tourist activity includes customers, suppliers companies, manufacturers of individual tourist and non-touristic services rulers bodies and agencies, local authorities, social funds, public and other organizations, etc., which affect or may affect it. Tourist organizations cannot be expected from market participants that they will behave the same way. For example, there are certain contradictions between hotel owners, locals and tourists. In addition, interested organizations can be divided into several groups according to the interests of the hotels at the ski resort is probably beneficial reduction of one-day tourism, and the owners of the ski lifts, on the contrary, advantageous to increase the flow of tourists. Even within the same group (for example, among the hotel complexes) traced the various interests. For example, large hotels are usually less interested in offering spa services because they are all necessary for accommodation and recreational visitors at home, and smaller hotels are interested in the travel agency to offer improved resort itself organized action. An important component is relationship between travelers and locals. To reduce the difference to balance the interests of different groups can be at the expense of a balanced plan and coordinate the development of tourism with the participation of stakeholders, guided by generally accepted norms and values. External effects of tourist product can be viewed as the specifics of tourism industry. Today, tourism has a significant impact on areas such as economy, ecology, politics, social life, which, respectively also affect tourism. Income from tourism is involved in the local economic cycle and creates an additional (multiplier) effects. Through Tourism there provided employment, created infrastructure, construction of new objects of culture and recreation. Time Tourists create stress on infrastructure, environment, culture and recreation, which may cause dissatisfaction of local residents. If you do not take these negative effects, not to determine ways to overcome them, tourism will not be able to serve as an activator of economy. In this regard, you need to plan and build infrastructure of tourism, with participation of all interested parties and organizations. In addition, there is a certain specificity of dialogue with surrounding tourist. Everyday life is representative of the tourist housing, work, leisure time, etc .. Holidays spent in traveling - is meeting with other travel and locals. The ratio of traveler to him and his motives are determined by how people used to live, to work, it is possible that the organization of free time. As a rule, the more in everyday life one feels limited natural resources, the more it must fulfill certain norms of behavior, the greater the desire to choose to relax unknown country. Research results indicate that behavior of the tourist impact on the attitude of local people and other travelers. So if tourists are satisfied with noisy parties, engaged in leisure activities that adversely affect the nature, it causes a negative attitude towards them locals and can spoil the rest. Finally, tourism management activity is specific and significantly different from the workers of other sectors, although at first it may seem that management of tourism in the region and firms is based on the same basis as management of any enterprise system "man - a man." The essential tasks of managers of tourism are:

- Determining the type of client and identifying its real needs;
- Comparison of the data from the resource potential of travel companies, is clarifying options for addressing these needs with the available tours and itineraries;
- Definition of common trends and patterns of demand, as well as its specific features.

3 Conclusion

Analysis of features of tourism as a control object shows that the industry is completely different from the others and therefore transferable developments and management model in other areas of labor in the sphere of tourism is impossible.

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Attracting foreign investments in tourism business sphere

Omonullokhon M. Akhmedov
PhD, associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

This paper was intended to discuss how to attract foreign investment in tourism business. It was considered a necessity to attract foreign investments in the sphere of tourism business. The development of tourism business was preconditioned by the fact how investments are attracted promptly and effectively and tourism infrastructure is rapidly developing in many countries. Participation of small businesses allowed strengthening export potential of tourism to diversify and expand tourism services.

Keywords :tourism sphere, tourism business, foreign investment attraction.

1 Introduction

Uzbekistan has huge potential of tourist business in various directions. However, involvement of small business sphere in tourism runs with not high rates. Although investment activity of travel agencies in republic is one of new lines of tourist sphere activity which is aimed to make a certain contribution to the efficiency on investment appeal of state and development of tourist industry.

Investment is crucial for all companies including tourist industry. Investment activity of travel agencies is one of ways of stimulating marketing and financial potential through expansion of investment possibilities, it is reliable, tested by international practice, variant of travel agencies integration in tourist market world, therefore the issue of investment activity of travel agencies in world tourist markets becomes one of the most actual ones.

This paper was intended to discuss how to attract foreign investment in tourism business with Uzbekistan case.

2 Discussion

At present stage of national economy modernization it is required to deepen cooperation and integration links of small businesses with large companies. Issues of interrelations of transnational companies with enterprises of small business in based country are solved at international level. Many developing countries show much consideration for determination of priorities of attracting foreign investments and creating joint ventures. It is especially attractive in tourism sphere. As all-round participation of small business in integration processes and deepening cooperation links with foreign companies is an important task.

Modern dynamic world stipulated by world economy globalization puts new requirements to the improvement of export potential of each country. Tourism development with universal involving small enterprises in it and expansion of new spheres of services is more important and necessary sphere of economic development and increase of export potential. Moreover, quantity of people, wishing to travel, spend their vacation learning culture of other countries is growing every year. Almost all countries “open their borders” for tourists, with a view of harmonious integration in social and cultural space of globalizing world.

For last 30 years rates of tourism development have surpassed development rates of other spheres of services development, except development of information-communication services. France, Spain, Greece, Great Britain, USA and also developing countries as China, Thailand, Malaysia, and Indonesia achieved unprecedented successes in tourist industry development. Therein the CIS countries in many respects yield to the countries of Eastern Europe on attraction of tourists and tourism infrastructure development, such as Hungary, Poland, Montenegro, Czech Republic, Slovenia, etc. The search of new cooperation forms with tourist operators on attraction of new segments of tourists, researches of modern tendencies of tourist business development is required.

A special attention is paid to tourism development in Uzbekistan. Tourist business potential is estimated more than 3 billion dollars a year and a

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volume of annually accepted foreign tourists can be increased to 2 million people. And this in its turn puts qualitatively new and rather large tasks before tourist companies on improving the quality of rendered services, deepening international contacts.

Uzbekistan pays a particular attention to attraction of foreign investments and expansion of international cooperation. For the last period Uzbekistan signed 45 intergovernmental, 44 interdepartmental and 17 business agreements. Since 1993 Uzbekistan is a member of World Tourist United Nations Organization (UNWTO), UNWTO support office operates in Samarkand - a "heart of Silk way" since 2004, coordinating development of tourism on transcontinental highway.

In Uzbekistan development of small and private business is recognized as one of major strategic directions of economic reforms, and in Antirecessionary program in 2009-2012 a paramount attention will be paid to stimulation of development and creation of conditions for them. It is necessary to promote and study foreign experience, enlighten issues of institutional reforms in management system of small business in the countries of South East Asia and strengthen a role of regional bodies of commercial and industrial chamber in providing information base for small of expanding international business, rendering consulting services in tourism sphere.

At present small business in tourism sector attracts more attention of politicians and scientists than ever. Therefore, it would be appropriate to establish joint ventures in the form of strategic business alliance based on experiences of small tourist companies of Malaysia and with the purpose of expanding international activities of travel agencies of Malaysia and Uzbekistan as well. These business alliances have been able to accelerate integration process of small enterprises of Uzbekistan in the sphere of tourism and attract more tourists creating modern infrastructure for tourism.

At present scientists and analysts are beginning to talk about economic growth and improvement of quality of people life on the basis of tourism development rates. According to the results of conducted conference of World Tourism Organization (UNWTO) held in January 29, 2013 in Madrid [UNWTO, 2013b], 1.035 billion tours were made in 2012 and international tourism was over 1 trillion dollars. Among the countries which attracts many tourists are France -79.5 million, USA- 62.3 million, China- 57.6 million, Spain- 56.7 million, Italy- 46.1 million, Turkey - 29.3 million visitors. An interest to the development of tourism infrastructure, its data supply is constantly expanding. There improved tourist services, expanded forms of tourism and created more exciting travel route.

Travel industry by its nature attracts more intellectual workers who know not only history, culture and foreign language. Proficiency in foreign languages may vary depending on occupations and locations of work. Moreover, practice shows that significant part of youth and women are attracted in tourism sphere. Tourism and service sphere is more attractive area in terms of creating new jobs and increasing employment.

Active and rational use of tourism standards (primarily international) makes it possible to ensure required quality of service, organize efficient and continuous technological process, and also leads to overcoming technical barriers in tourist market, broaden base of tourism cooperation with foreign partners, which increases the competitiveness of our tourism companies in the world market.

The analysis showed that further development of tourism business depends on concerted action of tourist enterprises of primary services: tour operators and tourist agents, transport entities of special purpose, hotel companies and other enterprises not only tourist profile, but related service industries: catering, transport companies, general purpose and other companies.

Globalization processes preconditioned the intensification of consolidation of hotel group or chain as a new form of economic organization with the elements of cooperation and integration. Creation and rapid expansion of international hotel chains is an objective process that will further continue. On the bases of hotel chains there laid a system of collective business, which is under direct control of management chain. Members of hotel chain are united by common rules, regulations, standards, style, forms of government and business.

Creating hotel chains enables the enterprises to gain benefit to single enterprises through: economizing scale; increasing investment opportunities; attaching world brands; uniting systems of reservation, software and information; constant growth of service quality.

Hotel market is Asian countries is rapidly developing. Key areas where the growth of hospitality industry is concentrated are Asia, Southeast Asia, Middle East and South Asia. Global hotel chains are aspiring to these areas. Asian hotel chains are still in formative stage, they are far behind European and American hotel chains according to main indicators. The most developed national hotel chains have Japan and China, other countries are far behind. The highest concentration of global hotel chains in Asia is in the South-East Asia and Middle East.

In the Republic of Uzbekistan in creating hotels belonging to international hotel chains, the most expedient is franchise agreement providing sale of license to use brand and rights to participation in sales and marketing network. In addition to franchising and management contract it is necessary to extend the practice of creating joint ventures

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in tourism. National hotel market is included in global processes, however, penetration of global hotel chains is very slow on the territory of our country.

Therefore it is necessary to carry out modernization of hospitality industry and it can be solved with creating hotel chains and their distribution in the regions in our country. Tashkent, Samarkand, Bukhara and Khiva are the most attractive for foreign investments. After construction of railway traffic through Kamchik pass in 2016 it is possible to expand hotel chain in Ferghana Valley as well.

3 Conclusion

In our opinion basic problems of hospitality industry of the Republic of Uzbekistan is in its weak integration into global tourism industry, large disparities in development of regions of the Republic, weak attractiveness of hospitality industry of our market to foreign companies:

- it is necessary to invest more investment in different financial sources as private, foreign and state;
- provision of funds (investments) for development of chain of domestic small business hotel;
- increasing a number of highly qualified managers and specialists of hotel business in Uzbekistan.

The abovementioned allows accelerating integration process of tourism in international tourism industry.

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Actuarial and Legal Basis of Reserving in Life Insurance

Bakhodir R. Shamsuddinov
PhD, associate professor,
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Anvar A. Nazarov
student
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

In the article there considered critical analysis which is subject to domestic practice of formation of insurance funds in insurance life. Authors assert that insurance funds calculated on the method of state inspections on insurance control of Uzbekistan which is adequate to liabilities of insurer before insured. There suggested retrospective method for policy of insurance payout.

Keywords :insurance funds, prospective method, retrospective method, rate of return, present value of insurance premium, present value insurance payout.

Dynamic development of insurance market of the Republic of Uzbekistan, increase in the number of insurance companies brings the problem of performing liabilities by insurance companies to the insured to the front. First of all, it is possible under the condition of calculation necessary volume of insurance reserves, which would be enough for insurance contract performances. That is why basic factor of insurer'sfinancial stability is the balance between insurance/reinsurance contract performance and volume of insurance reserves. How would we define, whether the insurance enterprise has enough reserves for insurance coverage?

From the point of view of financial theory, insurance reserves are special insurer's funds for obligation to pay insurance indemnity (insurance coverage) which should be paid in the case of loss event. The reserve should be equal to assets value, which are necessary to the future contract performance.

According to the actuarial science, insurance reserves are estimates of insurer's financial commitment to the insured. The value calculation of such reserves is based on the actuarial principles and is applied when demographic and financial variables of life insurance have certain assumptions.

The calculation is based on so called principle of equivalence, according to which:

Reserve = Present Value of Future Benefits – Present Value of Future Premiums

In actuarial mathematics this formula looks the following way:

$$_tV = PV(FO_t) - PV(FI_t)$$

$_tV$ - amount of the reserve at the time t;

FO_t - Insurer's Future Outgo under the insurance contract during the time period, from the calculating date till the end of the contract;

FI_t - Insurer's Future Income;

PV - present value of cash flow. It is calculated in a way of discounting expected payments (incomes) taking into account the probability these payments (incomes) would be made.

According to the Life Directive of European Parliament and Council, No. 2002/83/EU of 5 November 2002, "it is necessary that, over and above technical provisions, including mathematical provisions, of sufficient amount to meet their underwriting liabilities". This requirement is an important element of prudential supervision for protection of insured people and policy holders.[Parliament and the Council, 2002]

Calculation of insurance reserves requires estimate basis, which helps to calculate the reserves volume. In life insurance estimate basis is based on the rate of return, insurance rules and demographic indicators of mortality and life expectancy.

Rate of return. There is quite a complicated problem of the rate of return being chosen when insurer's and insured's commitment is assessed. In many countries rate of return establishment is limited when reserves are defined and calculated. For instance, according to regulative EU directives, the limit value for the rate of return cannot be more than 60% received by long-term government securities with fixed income. The rate of return is determined by refinancing rate of the central bank of the country in the countries with soft capital market. For instance, in the Republic of Belarus it is not recommended to establish the rate of return more than

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refinancing rate of National Bank of the Republic of Belarus [Ministry of Finance, 2014]. And in Russia the rate of return, which is used to calculate insurance reserves, is established by the insurer depending on the conditions of the life insurance contract and yield on government securities and couldn't be more than 5% [Ministry of Finance, 2009].

Insurance rules. The volume of insurance reserve also depends on the nature of financial obligations assumed by the insurer and insured under the terms of a life insurance policy and depends on other factors, which influence the results of insurance. These factors are:

- insurance risks (death of the insured, the endowment to the age specified in the policy, etc.);
- terms of insurance;
- payment order of the insurance premium (lump sum, annually, monthly, etc.);
- payment order of insured sum (lump sum, on a regular basis, annuity, etc.);
- sum insured (fixed, indexed, and so on);
- conditions of insured's participation in the investment income of the insurer;
- terms of the redemption sumpayment in case of early termination of the contract.

In life insurance, reserve volume is also dependent on age, gender and health condition. Quantitative assessment of this dependency is made by using mortality tables. The premium payments and size of reserves are calculatedon the basis of those tables. The same demographic indicators may have different values for different types of life insurance. For example, if a high level of mortality in term insurance brings losses to the insurer, then in the pure endowment assurance or annuities he gets profit.

On mortality and disability and reliable forecasts of future rates of return a retrospective (accounting) method is frequently used for the reserve calculations, according to which:

Reserve=Accumulated Value of Premiums – Accumulated Value of Benefits

Legislative basis of the insurance reserves calculation in Uzbekistan is 'Insurer's reserve statute' and 'Paying capacity of insurers and reinsurers', which were adopted by the order of the Minister of Finance of the Republic of Uzbekistan 20 November 2008 #107 and 22 April 2008 #41 respectively.

In our opinion, some of the points of statement mentioned above require further improvements. For example, in accordance with the paragraph 5 of 'Paying capacity of insurers and reinsurers' statute, during the implementation of life insurance, the insurer is obliged to generate reserves for premiums [Minister of Finance, 2008].

Premium reserve is used for fulfillment of obligations to ensure future payments under life insurance contracts, which might occur in the next accounting period, and granting loans for insurance policy. Premium reserve consists of the reserve on accumulative types of life insurance (RAL) and reserve on other types (RL).

According to the section 19 of the Statement, RALis calculated by each contract in the amount not less than 92 per cent of basic insurance and 50 per cent return on investment of its placement till the end of the contract or occurrence of loss. In this case, the resulting size RAL should not be less than redemption sum (guaranteed if early termination of the insurance contract), which is under the contract of insurance.

In our opinion, RAL calculation is not quite correct. According to the section 7 of the Statement, basic insurance premium - is the insurance gross premium, which is charged in accounting period minus charged commission fee for the intermediary services of insurance (and reinsurance) contracts and preventive measures reserve calculation sum. In life insurance, premiums are generally paid in installments (monthly, quarterly, or annually). If we proceed from the method of RAL calculation, which is recommended by the Statement, premiums charged in prior accounting periods are not included in the calculation of the reserve. It means that the reserve calculated this way does not conform to company's obligations to insured's.

Other types of premium calculations (except for accumulative types) of life insurance are made with 'pro rata temporis' methods and '1/24 methods'. According to these methods, the reserve is reduced in proportion to the expiration of insurance period, and both of these methods are used exclusively in the field of general insurance for the types of insurance where the insured risk is uniformly distributed in time. For this reason, we consider it inappropriate to use these methods when calculating the premium reserve in life insurance.

The peculiarities of life insurance and big differences in approaches to the reserve calculations in the life insurance and general insurance, we consider it appropriate to develop separate legislation (Statement, Order or guidelines) for calculation of insurance reserves for life insurance. We also believe that it is appropriate to use forward-looking approach of reserve calculation, as far as in Uzbekistan keeping statistics in the field of demography is at a high level. Creating tables of life, which are used in the calculation of reserves, is not a difficult task.

In our opinion, insurance reserves calculation for life insurance should be carried out according to the

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following principles:

It's necessary to establish standard technical and mathematical reserves, which provide financial stability of the insurer. At the same time amount of technical reserve for life insurance should be calculated on the basis of a rather conservative prospective actuarial valuation criteria, taking into account all future liabilities defined by insurance contract.

In the absence of a reliable calculation basis we need to use the retrospective method, according to which:

- if the accounting period – a quarter

$$R_L = R_{L_0}(1 + 0,25i) + P_n(1 + 0,25i) - B \pm R_r$$

- if the accounting period – a year

$$R_L = R_{L_0}(1 + i) + P_n(1 + 0,5i) - B \pm R_r$$

R_L- the reserve amount for life insurance at the end of the current accounting period;
R_{L_0}- the reserve amount for life insurance at the beginning of the accounting period;
P_n- insurance net premium received during the reporting period;
i - technical interest rate (in decimals);
B - insurance payments charged;
R_r- reserves of the contract, received $(+)$ or given to $(-)$ reinsurance during accounting period.
It's necessary to create such additional insurance reserves for life insurance companies except mathematical reserves:

- reserve for reported but not settled claims (RBNS reserve);
- reserve for incurred but not reported claims (IBNR reserve);
- reserve of insurance bonuses;

Rate of return used to calculate insurance reserves which should be established by the insurer depending on the conditions of the life insurance contract and yield on government securities, and shall not exceed the rate of the Central Bank of the Republic of Uzbekistan.
In the cases when there guaranteed redemption sum under the insurance contract, the amount of mathematical reserves for the contract at any time must be at least the same as the redemption sum guaranteed at this very moment.

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Prospects for Development of Insurance Market in National Economy

Tamara K. Aglamova PhD
associate professor Tashkent Branch
of Russian Economic University after
G.V. Plekhanov, Republic of
Uzbekistan

Botirbek D. Aglamov
Leading Specialist of "Madad" CA
Republic of Uzbekistan

Abstract

The article discusses a role and importance of insurance sector in national economy, which requires further improvement in this direction. At present stage the Republic of Uzbekistan is on the path of active reforming and modernizing the country, where a major challenge facing the government is to further the preservation of sustained high economic growth rates, macroeconomic stability and competitiveness of its industries. '

Keywords :insurance market, insurance companies, insurance agents, insurance brokers, insurance contract, private insurance, property insurance, compulsory liability insurance, business insurance, commercial contracts, bank loans, integration of insurance market, international insurance markets

1 Introduction

For the year of independence economy of Uzbekistan has achieved sustainable growth and stability of social and economic development. There continued formation and further development of financial institutions - banks, insurance and leasing companies, credit unions, pawnshops and other non-bank institutions and increased a number of financial services provided by them. The president of Uzbekistan Islam Karimov said: "The most important factor in provision and sustainable economic growth is service sector. As international experience shows, now it is this area which holds a dominant position in formation of GDP, employment, people's welfare. At the end of 2014 rendered "market" services volume increased by 15.7 percent, and their share in GDP increased from 53 percent to 54 percent. Insurance market makes a certain part in this process. National insurance market of the republic has development tendency. As a whole, in the republic, there formed an effective competitive market of insurance services, where 31 insurance companies currently operate. The paper present the discussion of role and importance of insurance sector in national economy.

2 Discussion

Development of insurance market of the republic is characterized by the following. Insurance companies according to voluntary and compulsory insurance in 2014 collected over 436.1 billion soums of insurance premiums, which is 29.0 percent higher than in 2013. Over the past five years, this figure increased by 3.7 times. During this period, the average annual market growth is more than 30 percent. National insurance market has managed to achieve such significant progress in its development thanks to huge support of the state and continuous improvement of legal framework. Particular attention of the Government of the Republic of Uzbekistan is paid to increasing the capitalization of insurance market, aimed mainly at transformation of insurance companies in powerful financial institutions that are not only able to answer your assets commitments, but transformed into a significant source of investment resources in the economy. Only last year total amount of authorized capital of insurer increased by more than 38.5 percent, insurance liabilities increased by 2.2 times, insurance premiums - rose to 171.3 percent, and insurance payments were - 171.1 percent. A crucial role in raising the level of capitalization of insurance market played adopted in 2011 Decree of the President of the Republic of Uzbekistan No PP-1544, according to which, in two phases – from July 1, 2012 and July I, 2014, there introduced new requirements for minimum authorized capital of insurers . As a result, in 2015, in order to obtain a license of insurance activity of insurer, it is necessary to form a statutory fund in the amount of 1.5 mln. euro, equivalent to carry out life insurance - 2.0 mln. euro, mandatory insur-

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ance - 3.0 mln. euro and carry out reinsurance - 6 million euro. As a direct consequence of increasing the financial strength of national insurers can be it is possible to note increasing retention on of larger volume of grate risks domestic market. From this perspective, insurance market of Uzbekistan is very, attractive. Since 2012 insurers have reinsured risks in 28 foreign countries. The largest share of insurance premiums accounts transferred to UK - 65% of passed total insurance premiums, Russia - 6.8%, Germany - 4.9%, as well as Belgium, USA, Ukraine and South Korea - almost 3%. Investment activity of insurance companies is becoming more active every year. Total volume of insurers' investments in national economy in 2014 reached 624.4 billion soums. This figure exceeds the volume of investments by 18.6%for 2013 . It should be noted that the largest part of insurers' investments is in deposits and securities. AS a whole, deposits the share (deposits) and securities in total investment makes 87.1%. In 2014, the volume of deposits of insurers with respect to 2013 has increased by 23.7% and made 294.3 billion soums, the volume of securities insurers rose by 6.6% and was to 249.5 billion soums. Their growth was respectively 67.8% and 61.8% to wards to 2011. The investment portfolio of insurers is represented, mostly highly liquid and reliable, from investments repayment of the product. The development of insurance market of Uzbekistan is also characterized by the following indicators: Total amount of insurance payments in all types of insurance was to 53 billion soums, which is almost 6 times higher than in 2007;

- Market infrastructure is changing qualitative and quantitative. Today there are 2 actuarial companies, surveyor 16, adjust and Assistance companies, 4 insurance brokers, about 7.5 thousand insurance agents;
- According to the most advanced modern technology, settlement of insurance claims there established body of pre-trial resolution of conflicts in insurance industry – institute of arbitration refereeing at Association of professional participants of insurance market.
- There developed and implemented risk early warning system, comprising obligatory passage of annual actuarial survey, remote assessment of solvency, development and implementation avto¬mative system for collecting and processing data that provided to timely detection of deterioration of financial situation and subsequent termination of the license of 3 insurance companies ;
- A powerful impetus to development of life insurance gives Law "On the main directions of tax and budget policy for 2015",adopted in December 2014 provided a whole range of benefits, taking into account the specificity of insurance, order of determining taxable base of mandatory contributions of insurers.

In the most productive, and therefore the most interesting stage was 2007 to 2014, which gave a powerful impetus to its development. During this period, legal framework of insurance activities, was completely revised nearly 90% of all legal acts regulating the relations in this sphere have been improved or adopted in new version during this period. These years there adopted 11 laws of the Republic of Uzbekistan, 5 Decrees of the President 10 Resolutions of the Government, more than 30 new positions, orders, regulations, guidelines and model regulations. There established international cooperation, in particular:

- Ministry of Finance has entered into International Association of Insurance Supervisors (IAIS);
- there established long-term mutually beneficial relationships with Japanese educational institutions Faliya and Olis, seminars of which in less than 5 years has trained more than 100 employees of insurance companies;
- there involved grant funds, UNDP, the World Bank and Asian Development Bank for development of insurance in the country;
- In 2012 Memorandum of Understanding on mutual cooperation in the field of financial supervision was signed between Ministry of Finance of the Republic of Uzbekistan and Financial Services Commission of the Republic of Korea (Financial Services Commision). Under this memorandum there held Uzbek-Korean business forum on development of financial market, which resulted in signing, protocol, of intentions for knowledge exchange.

In Uzbekistan since 2008 there operated the first national insurance pool, the founders of which were insurance companies «Temir Yollari Sugurta», «ALSKOM», «Kapital Sugurta» and others with registered capital more than 13.9 billion soums. Insurance pool provides coverage of major risks for multimodal transport, providing cargo hauling road, rail and sea transport. Next stages of development of insurance market of the republic are:

- increasing the volume of insurance premiums collected in national market, ensuring their growth by faster rates;
- improving the types of compulsory insurance, transform them, regardless of their form of ownership in pretty big players in market that can compete with the branches of international insurers in the case of their arrival of the market of Uzbekistan;

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- to continue the course for further development of kinds of insurance, stimulating demand for insurance services and at the same contribute to the development of voluntary insurance;
- to strengthen implementation of advanced technology sales - via the Internet - sales through post offices, sales via so-called "supermarket of insurance services" and new technologies of insurance products such as benchmarking, merchandising, etc.; to develop measures of state regulation aimed to protect local insurance providers that can ensure creation and development of strong national insurance market.

It is planned to focus on priority development of various types of life insurance that will create a powerful insurance reserves allocated for implementation of investment programs.

3 Conclusion

System that has been created is applied in the form of web and mobile applications. But at this writing are discussed only in the system design and user interface design.

The system starts from user login till the user logout. Design System made by using aspects in the GTA with Euterpe tools. And User Interface Design made using Pattern made using pattern method.

System and usability evaluation results show that the system design and interface design created have fulfilled most of the needs of users and easy to use.

With the development of this social network, the data collected can create a new policy that allows the citizen scientist assisted in the development and data management of biodiversity.

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Determinants And Impact of Reinsurance Capacity On Indonesia's Balance of Payments: a Proposed Research Model

Agus Muharam
Doctoral Degree in Economic –
Gunadarma University
muharam@marein-re.com

Abstract

This article discusses the relationship between factors that could influence reinsurance capacity optimization and its impact on balance of payment in life insurance industry in Indonesia. Reinsurance is a necessity for insurance companies in order to reduce the risk of insolvency, and increase the capacity of underwriting of direct insurance companies. By optimizing reinsurance capacity will improve the company's performance and impact to the economic growth. In the past 5 years the reinsurance balance of payment transaction in national insurance industry indicated deficit result. This fact shows that the optimization of national reinsurance capacity is needed to control the deficit in balance of payment, especially in life insurance sector. Using retention, claim ratio, cost ratio, premium, sum insured, and capital as variables. Secondary data will be taken from the annual reports of life insurance companies over the 10 years period from 2004 to 2013 and panel data regression analysis i.e. the Pooled Regression Model as the method of the research. This study may serve scientific thinking in optimizing reinsurance capacity of life insurance and reinsurance, also may contribute as an alternative solution in controlling balance of payment in life insurance sector.

Keywords :Reinsurance, reinsurance capacity, balance of payment

1 Introduction

Based on data obtained from Financial Services Authority ([OJK, 2013]), in the past 5 (five) years the life insurance industry in Indonesia shows significant growth. Reinsurance is a necessity for insurance companies, especially in terms of spreading the risk. Provisions regard the reinsurance support has been established in the Constitution of Indonesia on Insurance sector, which defines on Financial Health of Insurance Company and Reinsurance Company ([Goverment, 2012]) and on Reinsurance Support, Minimum Self Retention, and Forms of Reports on Reinsurance Program ([Bapepam-LK, 2013]). The realization of the reinsurance support will provide certainty and assurance for the insurance company, especially in supporting payment of claims to the insured.

Balance of payments for life insurance sector in Indonesia has experienced continuous deficit based on Financial Services Authority (OJK) data. As the result, there are higher amount of proceeds going out of the country compared to proceeds going into the country in this life insurance sector. The balance of payments deficit in life insurance sector was caused by lack of optimization of insurance and reinsurance capacity in the country. This caused a lot of insurance and reinsurance companies choose to purchase the capacity to overseas reinsurance company.

A combination of many factors which affect the equilibrium of the reinsurance market can explain the higher prices of reinsurance relative to the expected losses. Shortages of capital, lack of transparency, shareholder-manager incentive conflicts, and agency problems can result in decreased capacity and increased prices of reinsurance, especially after the huge losses that occur due to a major catastrophic event ([Cummins and Weiss, 2002]).

Reinsurance regulations have the greatest impact on international (unauthorized) reinsurers. As indicated already, domestically licensed reinsurers may obtain substantial gains if the current proposed regulatory restrictions are adopted. In effect, this protects local reinsurers from competition and enhances their profit potential ([Weiss, 1993]).Optimal reinsurance cover depends on many factors including retention levels, premiums and the variance of sum insured values and therefore claims ([Veprauskaite and Serris, 2012]).

Bernard and Tian ([Bernard et al., 2008]) on

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their paper they derived the design of the optimal reinsurance contract to maximize the expected profit when the regulatory constraints are satisfied.

Reinsurance utilization and dependence and exposure of reinsurance (independent variables) have been analyzed with respect to their impact on certain firm's performance indicators, such as; loss ratio, expense ratio and firm size (dependent variables) ([Iqbal and Ur Rehman, 2013]). Raising capital can be a lengthy (and complicated) procedure and increasing insurance premiums is limited due to competition in the insurance market. Thus, buying reinsurance is often the most convenient and practical option to increase the insurers capacity ([Eden and Kahane, 1988]).

Veprauskaite and Serris ([Veprauskaite and Serris, 2012]) explain that in order to assess which of the existing reinsurance arrangements, quota-share, surplus or combination of quota-share and surplus, are optimal from the insurer's point of view, both profitability and risk criteria are used. Two measures are employed to assess profitability criteria:

- Retained premium-to-retained claims ratio (RPS)
- Difference between retained premiums and retained claims.

The first ratio - RPS - shows how much premium income is retained by the insurer in relation to every retained claim dollar. The largest RPS ratio identifies the optimal reinsurance arrangement as it allows the insurer to retain the largest proportion of premium for every retained dollar of claims. Therefore the second profitability measure - the difference between retained premiums and retained claims - is employed, which shows the total amount of retained premium after paying all claims and reinsurance premiums, and represents the underwriting profit (loss) before administrative expenses. The reinsurance arrangement which enables the insurer to maximize retained premiums is theoretically optimal from profitability point of view.

In the United States, international reinsurance transactions affect the United States balance of payments. Data for 1988 indicate that net receipts from reinsurance transactions in the United States is -$1.925 billion; thus an unfavorable balance exists already from reinsurance transactions in the balance of payment account ([Governors, 1989]).Even if reinsurance transactions netted out in determining the balance of payments, balance of payment considerations should not be ignored ([Weiss, 1993]).

This article describes a proposed research model based on theoretical framework and previous research. Research model describe a relation between variables and reinsurance capacity optimization, and relation between reinsurance capacity optimization and balance of payment. The objective of this research is to provide guideline of strategy to be taken in order to increase the capacity of life insurance and reinsurance in Indonesia as an attempt to control the deficit in balance of payment in life insurance sector, also to identify factors that could influence optimizing reinsurance capacity and to identify the steps to be taken in order to control the balance of payment deficit.

2 Literature Review

"Reinsurance is the transfer of insurance risk from one insurer to another through a contractual agreement under which one insurer (the reinsurer) agrees, in return for a reinsurance premium, to indemnify another insurer (direct insurer, primary insurer or Cedant) for some or all of the financial consequences of certain loss exposures covered by the primary insurer's policies" ([Domenichini and Crugnola, 2007]).

Reinsurance utilization and dependence and exposure of reinsurance (independent variables) have been analyzed with respect to their impact on certain firm's performance indicators, such as; Loss Ratio, Expense Ratio and Firm Size (dependent variables). Three econometric models have been used for panel data regression analysis i.e. the Pooled Regression Model ([Iqbal and Ur Rehman, 2013]). In this way reinsurance plays an important part in the contribution of the insurance industry to social welfare and economic growth ([Baur and Donoghue,]).

An economic analysis of reinsurance regulation is provided in Weiss ([Weiss, 1993]). First, this research examines Meier's comprehensive economic theory of regulation and shows the motivations of players in reinsurance regulation, as well as their power to shape the reinsurance industry. Second, characteristics of the reinsurance industry are reviewed to see if any reason legitimately exists to regulate reinsurance. Third, the economic impact of regulation for the reinsurance industry as a whole, for the property-liability insurance industry, and for captives is evaluated. Finally, recommendations are made for new regulations.

Cummins et al. ([Cummins et al., 2008]) have used LR in their analysis and found that reinsurance significantly reduces volatility in the loss ratio. Al-Shami ([Al-Shami, 2008]) found a significant negative relationship between LR and profitability of the insurance industry in the UAE. The insurance companies use reinsurance as an action to enhance their business and to reduce the probability of their losses because by adopting this technique an insurance company can write more business without increasing its own capital ([Pitselis, 2008]). Al-Shami ([Al-Shami, 2008]) said that the volume of capital was positively related to profitability, this re-

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lationship is also significant. In line with the renting capital hypothesis, Shiu ([Shiu, 2011]) found that insurers purchasing more reinsurance would have higher leverage, possibly because reinsurance purchases, like renting capital from reinsurers, increase the insurer's surplus, allowing the insurer to write more new policies, thereby increasing their leverage but maintaining a certain level of solvency.

MacMinn ([MacMinn, 1987]) and Plantin ([Plantin, 2006]) have argued that reinsurance and capital structure might jointly be determined. Meier and Outreville ([Meier and Outreville, 2006]) argued that by using reinsurance the direct insurer can increase its volume of premiums more than it would be able to with the given amount of capital. The reinsurance practice increases the capital and underwriting capacity of the direct insurer, and results in increased business, if the direct insurer continues to write more business without increasing its own capital the financial distress will increase, which will ultimately result in the decreased performance of the firm ([Iqbal and Ur Rehman, 2013]).

Cole and McCullough ([Cole and McCullough, 2006]) found that the firm size of an insurance company affects the demand for reinsurance. They showed that the firm size primarily drives the demand for foreign reinsurance. The results of their research indicate that the decision to utilize some percent of foreign reinsurance is driven primarily by the financial and operational characteristics of the ceding company such as firm size, group affiliation, and organizational form.

Optimal reinsurance cover depends on many factors including retention levels, premiums and the variance of sum insured values (and therefore claims), as a result an insurer should assess the tradeoff between retained premiums and the variance of retained claims based on its own experience and risk appetite ([Veprauskaite and Serris, 2012]). Cummins et al. ([Cummins et al., 2008]) and Shimpi ([Shimpi, 2002]) show that the optimal use of reinsurance can increase shareholder value by substituting for equity thereby reducing the cost of capital and increasing returns from underwriting activities.

Veprauskaite and Serris ([Veprauskaite and Serris, 2012]) extends previous research on optimal reinsurance by directly analyzing a portfolio of differing policies, allowing for different retention levels and different reinsurance loadings based on actual insurance and reinsurance claims and premiums. The number of retention levels can influence the results, that is, when the portfolio is homogenous (e.g., only one or two different retention levels are used), surplus or a combination of quota-share and surplus reinsurance are optimal as these covers minimizes the variance of retained claims. Claim variance has an influence on the choice of optimal reinsurance cover. When the variance of total claim amounts is relatively small, quota-share reinsurance tend to be the optimal cover as the price of this cover is almost always the lowest. However, when the variance is relatively large, quota-share does not perform optimally and either surplus or quota-share and surplus should be chosen. In most cases, surplus reinsurance results in the smallest retained claim variance, however it also leads to the smallest retained premium amounts ([Veprauskaite and Serris, 2012]).

3 Proposed Research Model

This study will analyze whether the variables used in this research, such as: retention, claim ratio, cost ratio, premium, sum insured, and capital will influence the reinsurance capacity optimization and its impact on balance of payment in life insurance industry in Indonesia.Conceptual model of this research can be seen in the following figure 1:

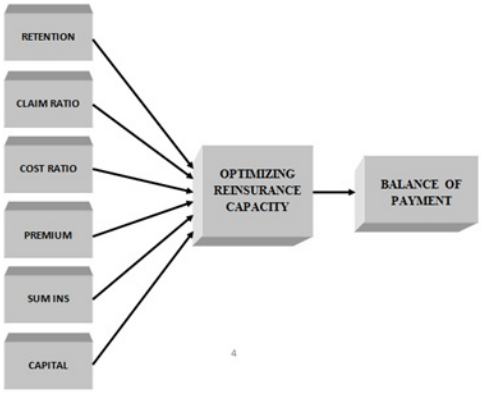

Figure 1: Conceptual Model

Secondary data will be taken from the annual reports of life insurance companies over the 10 years period from 2004 to 2013 and panel data regression analysis i.e. the Pooled Regression Model as the method of the research. Secondary data would be compiled from Indonesia Financial Services Authority (OJK), the Indonesia Life Insurance Association (AAJI), and the annual reports of life insurance companies from 2004 to 2013.Financial Services Authority (OJK) describes below formula:

$$Balance\,of\,Payment\,Reinsurance = Inward + Outward$$

- **Inward** : Reinsurance Premium Income - Reinsurance Commission Income - Claim Settled.
- **Outward** : Reinsurance Premium Outgo - Reinsurance Commission Outgo - Claim Recovery.

Determinant or independent variables used in this study are retention, claim ratio, cost ratio, premium collected, sum insured, and capital. Panel data regression analysis i.e. the Pooled Regression Model will be taken as statistical tool for data analysis. Proposed research hypothesis that will be tested are :

1. There is no correlation between variables and reinsurance capacity optimization,
2. There is no correlation between reinsurance capacity optimization and balance of payment.

This reserach also consider other factors as moderator to see correlation between optimizing reinsurance capacity and balance of payment, such as inflation and exchange rate.

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Clustering of Indonesian General Insurance Company Based On Financial Performance: Preliminary Study

H. M. Imam Basuki
Doctoral Degree in Economics,
Gunadarma University
hmibasuki.hmib@gmail.com

Abstract

This study was a preliminary study to develop research model of general insurance performance in Indonesia. The main objective of this research is to explain difference of financial performance between companies based on clustering technique. The research samples are 78 general insurance companies, which published financial report in 2014. The predictors of the research model are four financial performance ratios: net premium written to total asset, investment yield to total asset, net income to total asset, and Risk Based Capital (RBC).The research sample formed four clusters that are classified as low, medium, high, and very high. The ANOVA test showed that there were significant differences among the cluster for all financial ratios.

Keywords :Financial Performance, Clustering, General Insurance, Risk Based Capital

1 Introduction

The general insurance companies underwrite policyholder's protection against various types of risk, such as fire, property, motor vehicles, health, accident, etc. As compensation of its protection, the general insurance companies receive a premium payment from policyholders that used for covering the expected costs and risks. In order to protect the risks, the general insurance companies that relatively sizeable need to diversify their insurance portfolio by transferring part of their risks to the third party, such as the reinsurance companies.

The general insurance companies should have an adequate capital and technical reserves in order to fulfill their obligation in accordance with the risks underwritten. The general insurance companies need to pay attention on the efficiency of the company's financial performance to be able to predict the company's ability to meets its obligations to policyholders in the future, both in the short and long term. Therefore, in order to be able to see the general insurance companies can meets its obligations in the future, then it is important to formulating a prediction model of the general insurance company's financial performance.

In this paper, the financial performance ratios will be used for developing a prediction model of efficiency of the general insurance company's financial performance in Indonesia. Beaver ([Beaver, 1966]) was using financial performance ratios to predicting the failure and testing with the purposes of building an empirical financial ratio's verification, while Wilcox (1970) developed a simple intuitive theory regarding business risks, and the Wilcox's result was used for explaining the Beaver's empirical observation on financial ratio's ability to predicting the company failure. Otherwise, Gestel et al. ([Gestel et al., 2007]) developed a ranking model of insurance company by applying sophisticated statistical techniques. Similarly, Harrington and Nelson ([Harrington and Nelson, 1986]) also developed a model to evaluate the financial ability of insurance company, then it was followed by Barniv and Hershbarger ([Barniv and Hershbarger, 1990]) developed a model which applying statistical techniques. Moreover, there was a comprehensive review on an insolvent insurance company's literatures explained by Barniv and McDonald ([Barniv and McDonald, 1992]).

Altman ([Altman, 1968]) assessed on issue regarding on analysis quality of financial ratios as analysis technique. Likewise, Garg, and Deepti ([Garg and Deepti, 2008]) researched on financial performance analysis of general insurance companies in India by comparing go public companies and private companies. Then, Mahmoud ([Mahmoud, 2008]) developed a multivariate model in order to predicting financial performance efficiency of general insurance companies in Egypt.

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2 Literature review

This study reviews the previous research that related with efficiency of general insurance company's financial performance. Beaver ([Beaver, 1966]) researched by grouping three criteria that used for selecting 30 financial ratios, that is the popularity as the first criteria that mostly used in bibliography; then the performance ratio as the second criteria that used in one of the previous researches; lastly, the cash flow ratios as the third criteria. Gestel et al. ([Gestel et al., 2007]) analyzed and predicted the insurance companies ranking by approaching a ranking model that adapted set of general applicable variables in all type of insurance business, such as capitalization, profitability, leverage, size, etc.

On the other side, by adapting regression analysis, Harrington and Nelson ([Harrington and Nelson, 1986]) developed a model to predicting a variables relationship between the premium ratio and surplus; and between the insurance company's characteristics, which includes asset and product diversification. Similarly, Barniv, and Hershbarger ([Barniv and Hershbarger, 1990]) developed a model with the main variables is the net profit to the total income, the commissions and other cost against the premium income, the non-acceptable asset against the acceptable asset, the changes against the product diversification, and the changes against asset diversification. This model was developed by using three multivariate analyses, that is the Multiple Discriminant Analysis (MDA); nonparametric analysis; and logit analysis.

A comprehensive review also was developed by Barniv and McDonald ([Barniv and McDonald, 1992]) that covers methodological issues and the non-parametric analysis on a qualitative respond model and general qualitative respond model by evading some statistical limitation. The developed model implemented various variables, such as the profitability dimension, the profitability against income, the asset and liability, and the surplus dimension.

Altman ([Altman, 1968]) classified various variables into five standard ratios: that is liquidity, profitability, leverage, solvability, and activity ratio. In order to predicting an insolvent of insurance company, the procedure need to be taken is :

1. Observing the statistical significances of various alternative functions that includes determination of the relative contribution of each independent variables;

2. Evaluating inter-correlation of relevant variables;

3. An accurate observing of profile variation; and

4. Assessment of analysts.

Moreover, by using twenty years variables of the go public company's financial ratios from 1994/1995 to 2005/2006 and the private company's financial ratio from 2001/2002 to 2005/2006, Garg and Deepti ([Garg and Deepti, 2008]) researched on analysis of financial performance of the general insurance companies in India. Mahmoud ([Mahmoud, 2008]) also researched a multivariate model in order to predicting the efficiency of the general insurance company's financial performance in Egypt, by using financial performance from 1992/1993 to 2005/2006 from six general insurance companies in Egypt that consists of three companies owned by the public and three companies are privately owned. The multivariate model was developed by using 25 financial performance ratios of those six general insurance companies in Egypt as predictive variables. By implementing a discriminant analysis model, it is concluded that logistic regression model is more accurate for predicting the efficiency of general insurance company's financial performance in Egypt.

3 Research Method

The sample data used in this study is the financial performance of General Insurance Company in Indonesia as of December 31, 2014. There are 78 (seventy-eight) companies, consisting of 9 (nine) companies owned by the community (public sector) and 69 (sixty-nine) privately owned (private sector). Definition of research variable can be seen in table 4:

Cluster analysis was done by determining the structure of the data by putting a similar observation data into one cluster. Clustering is based on the observation of correlations between the objects or by measuring the proximity to the two-dimensional space, so that the distance between the two observations showed similarities. According to Ghozali ([Ghozali, 2011]), the main purpose of cluster analysis is to classify the objects based on the characteristics possessed, so that each object has some similarities with others in the cluster. The results of this cluster must have a high internal homogeneously and high external heterogeneously. When the clustering is successful, then the object in the cluster will be mutually close to each other and another different cluster will be away from each other.

One of the way to measure the similarity or likeness is Euclidean Distance that measure the distance between two geometric objects $X(x_1, x_2, x_3, ...x_n)$ and $Y(y_1, y_2, y_3, ...y_n)$ so that $d = \sqrt{\sum_{i=1}^{n}(x_i + y_i)^2}$, where n is the number of variables; xi and yi are the values of the variable to i at the point X and Y. By using Eu-

Table 1: Statistical description of four financial ratio

	N	Minimum	Maximum	Mean	Std. Deviation
Net Premium Written to Total Asset	78	,44	67,37	24,8407	13,68173
Investment Yield to Total Asset	78	-,42	9,23	3,0201	1,88631
Net Income to Total Asset	78	-15,98	12,13	2,5767	4,78179
Risk Based Capital	78	55,07	1382,00	336,4632	279,29566
Valid N (listwise)	78				

Table 2: Performance difference between private and public company

Variable	Private Company		Public Company		t-value
	Mean	Std. Deviation	Mean	Std. Deviation	
Net Premium Written to Total Asset	24,23	13,85	29,56	11,95	(1,10122)
Investment Yield to Total Asset	2,93	1,88	3,75	1,86	(1,23141)
Net Income to Total Asset	2,21	4,92	5,41	2,06	(1,91966)
Risk based Capital	347,94	291,96	248,49	128,07	1,00480

Table 3: Cluster membership for each type of ownership

Ownership	Group of financial performance								
	Low		Moderate		High		Very High		Total
	No.	%	No.	%	No.	%	No.	%	
Private	11	15,94%	32	46,38%	14	20,29%	12	17,39%	69
Public	0	0,00%	5	55,56%	0	0,00%	4	44,44%	9
Total	11		37		14		16		78

clidean Distance, the smaller of the distance, the more it resembles an object. However, it is very sensitive to the amount of the variance distribution. Another way to measure the similarity or likeness is Manhattan Distance that measure the distance between two geometric objects $X(x_1, x_2, x_3, ...x_n)$ and $Y(y_1, y_2, y_3, ...y_n)$ so that $d = \sqrt{\sum_{i=1}^{n} |x_i + y_t|}$, where n is the number of variables ; xi and yi are the values of the variable to i at the point X and Y.

After the measurement of similarity between objects is done, the next step is how to classify objects based on similarity by Hierarchical Clustering method or K-Means Clustering method. At this preliminary study, the method of clustering is using K -Means Clustering: By assuming k clusters and defining k centroids, one for each cluster, this algorithm aims to minimize the objective function, which represents the squared error function in the following form: $S = \sum_{j=1}^{k} \sum_{i=1}^{n} |x_i^{(j)} - C_j|^2$, where $|x_i^{(j)} - C_j|$ is a chosen distance measure between the data points $x_i^{(j)}$ and the cluster center C_j.

4 Result and Discussion

The company's assets range from IDR63.751 million to IDR11,279.069 million with an average of 1,458,989 million Rupiah. The average total asset of private company is greater than the pubic company that is IDR1,486,847 million compared to IDR1,245,414 million. The public companies have the net premium written, investment yield, capital, and net income that is higher than the private companies are. The capital ranging from IDR55,492 million to IDR6,577,864 million with the average of IDR479,479 million. The net premium written ranging from IDR5,208 million to IDR2,639,937 million with the average of IDR329,258 million. The investment yield ranges from IDR-759 (loss) million to IDR640,975 million with the average of IDR50,213 million, and the net income ranging from IDR-122,787 (loss) million to IDR1,013,716 million with the average of IDR64,925 million. Variable used for cluster analysis are Net Premium Written to Total Asset, Investment Yield to Total Asset, Net Income to Total Asset, and Risk Based Capital (RBC). Statistical description for the four variables can be seen in the table 1.

To determine whether the general insurance companies (private and public) have the same strategy in developing the efficiency of financial performance, we will test the following hypotheses.

In Table 2, it appears that the results of t value is smaller than a table t at a significance level of 5% , then all four of these ratios are not able to distinguish the two groups ownership of the company (going public and private). Thus, the general insurance companies (private and public) have the same strategy in developing the efficiency of financial performance. By using the K-Means Clustering method, we can organize our data into four level

Table 4: Variable definition

Variable	Definition
NetPremiumWritten to TotalAsset	Net Premium Written Ratio of Total Asset: Examines the effectiveness of the assets a business employs in retaining premiums
InvestmentYield toTotalAsset	Investment Yield Ratio of Total Asset: Measure the efficiency of investment portfolio in the assets
NetIncome to TotalAsset	Net Income Ratio of Total Asset: Expresses the relationship between the net income of the business generates and total assets
Risk Based Capital	Risk Based Capital (RBC): the amount of capital based on risk assessment that the company must continue to protect the customer against the negative development of the company

of efficiency for financial performance (low, moderate, high, and very high) as shown in table 5 below.

Table 5: Cluster membership based on financial performance

Group of Performance	Number of company	Percentage
Low	11	14,10%
Moderate	37	47,44%
High	14	17,95%
Excellent	16	20,51%
Total	78	100%

Table 3 presents the cross-tabulation between the ownership type (private and public) and the cluster classification based on financial performance.

Table 4 shows that 15,94% of private sector lie in the low-efficiency cluster of financial performance, 46,38% of private sector lie in the moderate-efficiency cluster, 20,29% of private sector lie in high-efficiency cluster, and 17,39% of private sector lie in very high-efficiency clusters of financial performance. On the other hand, there are not public sector lie in the low and high-efficiency cluster, 55,56% of public sector lie in the moderate-efficiency cluster, and 44,4% of public sector lie in the very high-efficiency cluster of financial performance. Differences in firm characteristics between clusters can be seen in the following figure 1.

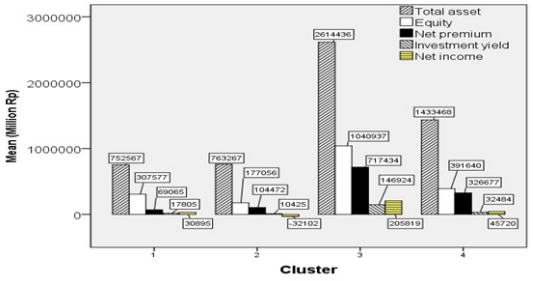

Figure 1: Financial differences between clusters

5 Conclusion and Proposed Further Research

Based on the preliminary studies that only use for the independent predictive variables to measure the efficiency of the financial performance for general insurance company. In practice are using more than four financial performance ratios, it is necessary to future research by using more than four the independent predictive variables related to the operations of general insurance companies with research model as figure 2.

Figure 2: Proposed research model

The model of this research is implementing many financial performance ratios as independent predictive variables. Thus, it is necessary to simplify independent variables by applying analysis factor. While, the dependent variable is the general insurance company, which is quite a lot, therefore it will be classified by applying cluster analysis. The ownership of company (private and public) also becomes a moderate variable that determining the efficiency of general insurance company's financial performance. By this research model, it is expected that we can develop a model prediction of the financial performance efficiency of the general insurance companies in Indonesia.

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Stochastic Frontier Analysis to Measure Efficiency in Indonesian Life Insurance Industry: A Preliminary Study

Suharyono Hadisumarno
Doctoral Degree in Economics
Gunadarma University
suharyonohadisumarno@yahoo.com

Abstract

The purpose of this paper is to measure the relative efficiency of life insurance company in Indonesia using Stochastic Frontier Analysis (SFA). Researh model refers to the model of Battese and Coelli (1995). This paper presented a preliminary study of technical efficiency for seventeen life insurance companies in Indonesia for the years 2011 to 2013. Data input of model are excess(deficiency) Solvency LevelLimits, admitted asset, net premium income, total revenue, total liability, management expense and total claim and benefit. The model tested by Frontier 4.1 software to obtain maximum likelihood (ML) and to obtain the relative efficiency of the life insurance company.

Keywords : Stochatic Frontier Analysis, Solvency Level, Maximum Likelihood

1 Introduction

Law of the Republic of Indonesia Number40Year2014concerningInsurancestated that Business Insurance is a business that organizes services risk mitigation which provide payments to the policyholder, the insured, or the other party is entitled in the event the insured dies or alive, or any other payment to the policyholder, the insured, or the other party has the right at any given time stipulated in the agreement, the amount of which has been established and/or based on the results of fund management. The results will be optimal if the fund management company's operations done effectively and efficiently. [Heimeshoff et al., 2014] conducted a study using stochastic frontier analysis techniques to estimate the efficiency and cost efficiency.

[Heimeshoff et al., 2014] conducted a study using stochastic frontier analysis techniques to estimate the efficiency and cost efficiency. While Chandrasekaran, [Chandrasekaran et al., 2013] investigated the efficiency of a life insurance company in India in 2011with the stochastic frontier model. [Barros et al., 2006] analyzed the technical efficiency level of life insurance companies in Portugal between 1995 and 2003 using the methods of stochastic frontier cost. Note also that Nazi (2012) have measured the relative efficiency of a life insurance company in Malaysia for the years 2007 to 2009 using the SFA. While Karim and Jhantasana (2005) have evaluated the cost-efficiency and its relationship with profit life insurance company in Thailand using a stochastic approach to the cost frontier. [Cummins and Zi, 1996] has presented a comparative analysis of cost efficiency frontier methodology and mathematical programming techniques for life insurance companies in the United States.

2 Literature Review

[Heimeshoff et al., 2014] conducted a study using stochastic frontier analysis techniques to estimate the efficiency and cost efficiency from 3,126 physician practices from 2006 to 2008. They set a one-step approach of Battese and Coelli to detect the factors that affect the efficiency of specialists and general practitioners. The result suggests that for investigative techniques and cost efficiency depends on the type of efficiencies that were analyzed. They gave examples of the technique efficiency of a set of doctors is significantly higher than the practice itself, while the cost efficiency of the results maybe different. Meanwhile [Chandrasekaran et al., 2013] investigated the efficiency of a life insurance company in India in 2011with the stochastic frontier model. They stated that the insurance company is said to be efficient if it generates maximum profit by using the minimum level of resources. They also stated that among the technical frontier, Stochastic Frontier Analysis is is one of the best techniques for determining efficiency.

[Barros et al., 2006] have analyzed the level of

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technical efficiency of Portuguese life insuranc ecompany between 1995 and 2003 using the method of stochastic frontier cost. They use a Cobb-Douglas frontier model and maximum likelihood estimation techniques were used to estimate the empirical model. [Nawi et al., 2012] have measured the relative efficiency of a life insurance company in Malaysia for the years 2007 to 2009 by using the Stochastic Frontier Analysis and they refer to the Battese and Coelli's model. They measured the relative efficiency of thirteen life insurance company in Malaysia. [Karim and Jhantasana, 2005] have evaluated the cost-efficiency and its relationship with profit life insurance company in Thailand using a stochastic approach to the cost frontier for 1997-2002. They found that on average 82% up to 140% is not efficient. They showed that inefficient negatively correlated with the ratio of ROE and ROA.[Gustavson and Lee, 1986], stated that during the merger activity there are only 40 companies that meet the criteria for the period 1968 to 1978, according to size, admitted assets, insurance in force, and the volume of premiums. [Cummins and Zi, 1996]have presented a comparative analysis of cost efficiency frontier methodology and mathematical programming techniques to 445 life insurance companies in the United States during the years 1988-1992. They said the alternative methodologies give significantly different estimates of efficiency for the insurer in their sample, and the choice of methodology can have a significant effect on the results.

[Aigner et al., 1977] have introduced a parametric approach to estimate the stochastic frontier production. Such an approach is a parametric production function and two-component form errors. [Battese et al., 1989] have estimated frontier production function and efficiency of Indian farms using panel data. They used a frontier production function of the Cobb-Douglas. The data used were 38 farms with a total number of 289 observations from years 1975-1985. If frontier production function to farm-level data from Aurepalle, they said family and hired labour are homogeneous, given the model considered for labour services. If using district-level data for India, family and hired labour are not homogeneous, and family labour should be weighted three times as much as hire labour. [Zamorano, 2014] has conducted a critical review and details of the method of parametric and non-parametric, where there is no better approach to the other. [Coelli, 1996] describes a computer program for maximum likelihood estimation of parametric functions and stochastic production costs.

[Aigner et al., 1977]has introduced a parametric approach to estimate the stochastic frontier production. Such an approach is a parametric production function and two-component form errors. [Berger and Humphrey, 1997] has introduced two techniques for measuring efficiency, i.e. the approach parametric and non-parametric approach. In the parametric approach advantage is to allow noise in measuring inefficiency. [Porcelli, 2009] has conducted a brief survey to measure the efficiency of the technique using the technique of parametric and non-parametric techniques.

The method for this study is the Stochastic Frontier Analysis (SFA) using model of [Battese and Coelli, 1992] and [Battese and Coelli, 1995]. SFA is one way in economic modeling. Frontier stochastic model was first built by [Aigner et al., 1977]. Usually the model of production and costs are based on the Cobb-Douglas function:

$$\log y = \beta^{'} x + v - u \tag{1}$$

where y is The observed observed results and$\beta^{'} x + v$ is optional production frontier (such as maximum production or minimum cost results), $\beta^{'} x$ is deterministic frontier and $v \sim N\left(0, \sigma_v^2\right)$is stochastic part. The components of x in general logs of inputs to production models or logs of output and input prices for the cost model, or squared the mean/or the cross product. The amount by which the individual was observed failing to achieve optimum is, namely inefficiency, where $u = |U|$and $|U| \sim N\left(0, \sigma_v^2\right)$. So that the stochastic frontier models become:

$$\log y = \beta^{'} x + v - u, \quad u = |U| \tag{2}$$

Based on [Battese and Coelli, 1995] frontier stochastic model contains two equations, one to represent the production frontier and the second to measure the technical inefficiency:
$Y_{it} = \exp\left(X_{it}\beta + V_{it} - U_{it}\right), \quad i = 1; t = 1$
$Eit = \exp\left(-U_{it}\right) = \exp\left(-Z_{it}\delta - W_{it}\right)$
First equation Y_{it}represents the output of the companies of the i^{th}company in the t^{th}time period. X_{it} is aK_x 1 vector of input of the i^{th}company in the t^{th}time period . A K x 1 vector of parameter β and δ estimated together with the variance parameters:

$$\sigma^2 = \sigma_v^2 + \sigma_u^2 \tag{3}$$

Technical efficiency was measured using the conditions expectations

$$E_{it} = \exp\left(-U_{it}\right) \tag{4}$$

Give shape composed error. First component, V_{it}, account for random events. Second component, U_{it}, is non-negative random variable that captures the effect of the relative inefficiency that can not be observed on stochastic frontier. is assumed independently and identically distributed with $N\left(0, \sigma_v^2\right)$. u is assumed to follow the form of

Table 1: Measurement of Efficiency

Cost of Production	Logged Dependent Variable	Efficiency
Production	yes	$\exp(-U_i)$
cost	yes	$\exp(U_i)$
Production	no	$(X_i\beta - U_i)/(X_i\beta)$
cost	no	$(X_i\beta + U_i)/(X_i\beta)$

arbitrary distribution, in this case half-normal distribution $N\left(Z_{it}\delta, \sigma_u^2\right)$. w is not distributed identically and are not required to be non-negative.

3 Research Model

Based on previous research and the development of models that may be used, it is proposed in this paper stochastic frontier model for panel data can be expressed as:

$$lnY_{it} = \beta_0 + \beta_1 lnx_{1it} + \beta_2 lnx_{2it} + \beta_3 lnx_{3it} \quad (5)$$

$$+\beta_4 lnx_{4it} + \beta_5 lnx_{5it} + \beta_6 lnx_{6it} + (V_{it} - U_{it})$$

where,

- Y_{it} = excess (deficiency) Solvency Level Limits of the i^{th} company in the t^{th} time period
- β = vector of unknown parameters to be estimated
- x_{1it} = admitted assets of the i^{th} company in the t^{th} time period
- x_{2it} = net premium income of the i^{th} company in the t^{th} time period
- x_{3it} = total revenue of the i^{th} company in the t^{th}time period
- x_{4it} = total liabilities of the i^{th} company in the t^{th}time period
- x_{5it} = total expenses of the i^{th} company in the t^{th} time period
- x_{6it} = total claim and benefit of the i^{th} company in the t^{th} time period
- V_{it} = non-negative random variable, associated with technical inefficiency of the total profit companies
- U_{it} = assumed independent and identically distributed (i.i.d) $N\left(0, \sigma_v^2\right)$ and capture noise statistics, measuring errors and other random.

Production efficiency is calculated based on the technique efficiency of each company of the estimated stochastic frontier production and estimation of stochastic cost efficiency, which is calculated by a computer program, Frontier versions 4.1. Measuring efficiency can be shown in Table 1.

Table 2: Test result of model parameter and coefficient

Parameter	Coefficient	Standard-error	t-ratio
β_0	-0.378195	1.812072	-0.208709
β_1	0.929454	0.185948	4.998474
β_2	-0.663586	0.834634	-0.795062
β_3	3.536025	1.824334	1.938255
β_4	-0.300738	0.135264	-2.223339
β_5	-2.595389	1.566993	-1.656287
β_6	0.032139	0.146767	0.21898
sigma-squared	1.050113	0.387866	2.707414
Gamma	0.835589	0.072026	11.601195

4 Result of Preliminary Study

In this paper, a preliminary study is accomplished to seventeen life insurance companies in Indonesia, this is done to illustrate the level of efficiency of each insurance company. Data derived from the financial statements of each life insurance company, where the dependent variable is the Excess or Deficiency Solvency Level Limits, while the independent variables are admitted assets, net premium income, total revenue, total liabilities, total expenses, and total claim and benefit. Reffering to [Coelli, 1996] which use software of Frontier version 4.1, the calculation result of the final mle estimates and technical efficiency can be seen in tables 2 and 3.

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Table 3: Technical efficiency estimates

Firm	Efficiency Estimates	Rank
1	0.800825	3
2	0.347398	14
3	0.483309	11
4	0.410154	12
5	0.691866	8
6	0.852099	1
7	0.321251	15
8	0.586105	9
9	0.547532	10
10	0.697127	7
11	0.76966	5
12	0.376172	13
13	0.798648	4
14	0.801363	2
15	0.138233	17
16	0.146108	16
17	0.708752	6
mean efficiency	0.557447	

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Insurance Guaranty Schemes Funding: Literature Review and Proposed Model for Indonesian Insurance Industry

Handayani
Doctoral Degree in Economics,
Gunadarma University
nday.cools@gmail.com

Abstract

The aim of this paper is to examine model for insurance guaranty schemes funding. Insurance guaranty schemes can be funding through various funding mechanism. Every funding mechanism will be elaborated. Funding for guaranty fund can be made by member companies in form of "premium" that can be levied ex-ante or ex-post. Premium charging can be calculated on volume-based, risk-based or flat-rate. This paper also evaluate funding model developed by Hato and Wagner. According to Hato and Wagner premium for the guaranty fund can be paid by policyholder or equity holder or both of them. Every option of funding have impacts on guaranty fund management, insurance companies view of risk they are facing and nominal premium that should be paid by policyholder.

Keywords : Ex-ante, ex-post, insurance guaranty fund, policyholder and equity holder contribution, risk-based premium, volume-based premium,

1 Introduction

Life insurance companies are highly leveraged financial institutions whose liabilities are formed by the policyholders' premiums that render the institutions responsible for meeting the claim obligations over a lengthy coverage period [Hwang et al., 2015]. In 2012 Indonesia FSA (Otoritas Jasa Keuangan/OJK) revoked business license of Asuransi Jiwa Syariah Mubarakah. On 18 February 2015, OJK filed a bankruptcy petition against PT. Asuransi Jiwa Bumi Asih Jaya (BAJ) at the Commercial Court in Central Jakarta District Court for the following reasons: a) BAJ no longer has the ability to meet its payment obligations to its policy holders or creditors; b) BAJ has violated prevailing insurance regulations by having its solvency level below the minimum requirements; and c) BAJ was unable to restore its solvency level back to the required level despite multiple warnings and restriction of business activities, which eventually led to the revocation of BAJ's business licenses.

On 9 September 2015, the Republic of Indonesia Supreme Court gave its ruling on the cassation application submitted by the Indonesia FSA (OJK) regarding the bankruptcy petition against PT. Asuransi Jiwa Bumi Asih Jaya (BAJ). The Supreme Court ruled in favor of OJK and approved the bankruptcy petition against BAJ. Two cases above are showing how society is so susceptible of life insurance insolvencies and/or bankruptcies. In order to give more protection to the society, many countries have developed insurance guaranty fund.

This paper proposes the roles of government on insurance guaranty fund. There are at least three rationales why the government should involve on insurance guaranty fund management: a. Government can cover "premium hole" left by insurance industry. Because the government collects taxes and receives payment of taxes from the taxpayers, then it is reasonable for the government to protect the public from financial debacle due to the collapse of one or more insurance companies. In this case the government can act as parties who contribute to the guaranty fund by closing a shortage of premium that is paid by the insurance industry to the guaranty fund. With the role of the government on the guaranty fund, it is fair to hope that covering provided by the guaranty fund will take the form of full coverage or coverage with no cap. b. Government will supervise guaranty fund in more robust way. Government contribution on the guaranty fund will make government do the supervision in the more thorough and careful way. The government will make sure every time that the guaranty fund will operate with the best performance. The government will make sure that the fund will always on the healthy and strongly condition. Anyway, like all of us government does not want to lose its money that was contributed on the guaranty fund. c. Government will complete its role as an insurance supervisor. With the contribution on the

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guaranty fund, government completes its role as an insurance supervisor. The government will exercise their preventive roles through its policies and regulations to prevent the occurrence of the financial disaster (preventive roles). If financial disaster still happen, the government will play an active role to solve the problem and make insurance industry returns to stable and healthy condition again (curative roles).

This paper reviews literature studies of insurance guaranty schemes. Model for Indonesian guaranty fund are developed with studies of the government involvement on the guaranty fund.

2 Literature Review

In many countries, insurance guaranty schemes are set up to cope with part of the obligations of insolvent insurers. Over the past decades, guaranty funds have been introduced when a country's insurance sector has assisted, as a cooperative effort with the regulator, in the liquidation of one (or more) defaulting companies [Hato and Wagner, 2011, Hato and Wagner, 2013].

The European Union's responded appropriately to the economic and financial crisis through announcement that it would review the adequacy of existing guaranty schemes in the insurance sector. The proposal of European Commission [Commission, 2010], based on work undertaken since 2001, is designed to lead to the adoption of a White Paper by 2010 that will be a European solution on insurance guaranty schemes. Not similar with the United States where each state has two guaranty associations, one for life and the other for property–liability insurance, both associations being incorporated in national organizations, the architecture of insurance guaranty schemes that exist in Europe is quite heterogeneous. From 27 member of the European Union in 2007 [Oxera, 2015], 13 countries have had insurance guaranty fund with similar schemes, but its extent is non-uniform (see Table 1).

Table 1: Insurance Guaranty Schemes Comparison (Hato and Wagner, 2013)

Country	Since	Segment	Contributions	Ex	RW	Compensation	Further Funding
Belgium	1972	NL*	One-time EUR 1.4 m	*Ante*	No	100%	*Ex post*
Canada	1988	L&H, P&C	n/a	*Ante*	No	85%, 70% both w/cap	*Ex post*, borrowing power
Denmark	2003	NL	Fixed per policy*	*Ante*	No	100%	State-guaranteed loans
Finland	1997	NL*, H	Cap 2% of premiums	*Ante*	No	100%	*Ex post*, (policyholders)
France	1999	L, NL, H	0.05% math. prov.*	*Ante*	No	100% w/cap 90%*	Borrowing power
Germany	2002	L, H	0.02% net reserves	*Ante, Post*	Yes*	100%	*Ex post**
Ireland	1964	NL	Cap 2% of premiums	*Post*	No	65% w/cap	Borrowing power
Italy	2006	NL*	5% of premiums	*Ante*	No	100% w/cap	None
Japan	1998	L, NL	% of premiums	*Ante*	No	80 – 100%	None
Korea	1996	L, NL	% of premiums	*Ante*	No	100% w/cap	None
Latvia	1999	L, NL, H	1% of gross premiums	*Ante*	No	100%, 50% both w/cap	None
Malta	1986	L, NL	0.125% of gross prems	*Ante*	No	75% w/cap*	Borrowing power
Norway	1996	NL	1% of gross premiums	*Ante*	No	90 – 100%	None
Poland	1991	L, NL*	1% of gross premiums*	*Post**	No	50%, 100% both w/cap	None
Romania	2001	L, NL	0.3%, 0.8% of gross pr.*	*Ante*	No	100%	None
Spain	2004	L, NL	0.3 – 3% of premiums*	*Ante**	No	up to 100% w/cap*	None
U.K.	2001	L, NL	Cap 0.8% of net prem.	*Ante*	No	90%*	Borrowing power
U.S.	1983	L&H, P&C	% of premiums	*Post**	No	100% w/cap*	National associations/funds

Table 2: Advantages and Disadvantages of Charging Mechanisms

Charging Mechanism	Advantages	Disadvantages
Flat-Rate	✓Simple calculation, using pro-rata.	✓Create adverse incentives in insurance markets (Cummins, 1988). ✓Provides no penalties to insurers who choose to engage in more risky operation (Hato and Wagner, 2013). ✓Not receive a higher premium for a higher-risk firm (Sommer, 1986). ✓Actually receive lower premium from a risky firm than from a safe firm (Sommer, 1986).
Volume-Based	✓Strengthened the risk-subsidy incentive (Sommer, 1986)	✓Adverse incentives for insurers and cross-subsidization between market players (Hato and Wagner, 2013).
Risk-Based	✓Avoid adverse incentives (Cummins, 1988).	✓Complicated and need more prerequisites (Ya-Wen Hwang, et al., 2015).
Ex-Ante	✓Enabling relatively quick handling of insolvency cases, as funds for policyholder compensation are always available (Yasui, 2001). ✓The existence of a sufficient amount of funds for policyholder protection ensures the visibility (Yasui, 2001). ✓Allows better predictability for member companies with regard to future financial burdens (Yasui, 2001).	✓The ready-to-use funds may introduce moral hazard for consumers, companies, and supervisors (Yasui, 2001). ✓Due to its visibility, a lack of sufficient funds could adversely affect public confidence (Yasui, 2001).
Ex-Post	✓Incurring virtually no admission cost such as fund management cost (Rymaszewski, 2012). ✓Member companies can retain funds until these fund are required (Rymaszewski, 2012).	✓Not being able to be organized in a truly risk-based way due to the fact that the insolvent insurance company, which may have been the most at risk, is typically not charged at all (Han, Lai, and Witt, 1997).

To be established, insurance guaranty fund must be funding by insurance industry through premium the industry paid to the fund. Premium can be charge ex ante, ex post or both of them. Whether the premium is charge ex ante or ex post, the best option for the fund is compulsory membership for all insurance company. For pricing, premium can be price volume-based, risk-based, or flat premium [Hato and Wagner, 2013]. All charging mechanism has their advantages and disadvantages. Table below summarizing the advantages and disadvantages of all charging mechanism.

Introduction of a one-period contingent claim model framework, for an insurance company based on a model is proposed firstly by Doherty and Garven (1986). A risk-adequate positioning of the involved stakeholders is allowed by this model framework. The model is adapted for three stakeholders, namely policyholders and equity holders of the insurance company, as well as, the insurance guaranty fund. The used claims structure explicitly Insolvency risk takes into consideration explicitly for the used claim structure: the value of the default put option introduced below is a measure for the insurer's safety level (see also, e.g., [Phillips et al., 1998] and [Gatzert and Schmeiser, 2008]).

Initially, fair positions of policyholders and equity holders are exposed in a setting without guaranty fund. Positions of policyholder and equity holder are assumed to be at equilibrium from a risk-adequate point of view. In the other words this "fair" returns on the initial contributions are derived from the policyholder premiums or the equity holder capital respectively (see, e.g., [Sherris, 2006] or [D'Arcy and Dyer, 1997]).

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Hato and Wagner[Hato and Wagner, 2013] proposed three models on how premium burden can be distributed between Policyholder and Equity Holder. They starting elaborate the models with stakeholder position without guaranty fund. Below is table and figures that summarize Hato and Wagner model for guaranty fund contribution.

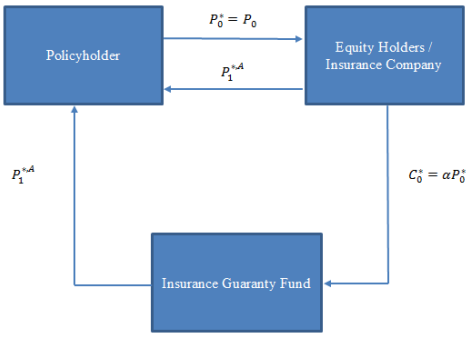

Figure 1: Setting A of Hato and Wagner Model

Illustration of the cash flows with an insurance guaranty fund at times $t = 1$ and $t = 0$ in setting A. Contributions C_0^* to the fund at time $t = 0$ originate from the insurance company and are not charged back to policyholders, whose initial premium payment $P_0^* = P_0$ is not affected. The indemnity payment to policyholders at time t = 1 comes partly from the insurance company $(P_0^{*,A})$ and the fund $(P_0^{*,F})$ (Hato and Wagner, 2013).

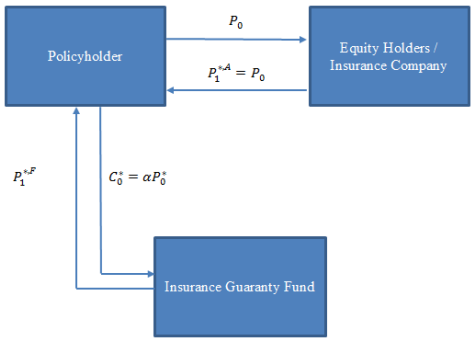

Figure 2: Setting B of Hato and Wagner Model

Illustration of the cash flows with an insurance guaranty fund at times $t = 0$ and $t = 1$ in setting B. Contributions C_0^* to the fund at time $t = 0$ originate from the policyholders whose initial premium payment to the insurer is not affected. The total position P_0^* corresponds to P_0 complemented by the contribution C_0^* to the fund. The indemnity payment to policyholders at time $t = 1$ comes partly from the insurance company $(P_1^{*,A} = P)$ and the fund $(P_1^{*,F})$ [Hato and Wagner, 2013].

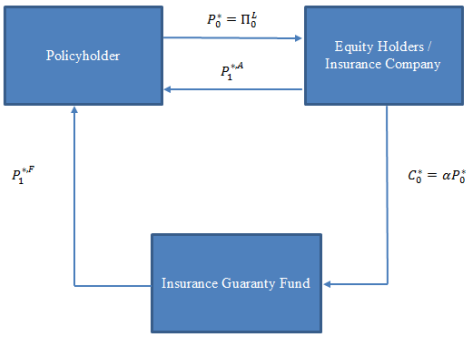

Figure 3: Setting C of Hato and Wagner Model

Illustration of the cash flows with an insurance guaranty fund at times $t = 0$ and $t = 1$ in setting C. Policyholders are assumed to have full protection of their claims through the insurance company and the fund. They are charged the default risk-free premium $(P_0^* = \Pi_0^L)$. Contributions $C_0^*$to the fund at time $t = 0$ originate from the insurance company. The indemnity payment to policyholders at time $t = 1$ comes partly from the insurance company $(P_1^{*,A})$ and the fund $(P_1^{*,F})$ [Hato and Wagner, 2013].

Table 3: Summary of Contribution Setting to Guaranty Fund

Setting	Policyholder Position	Equity Holder Position	Guaranty Fund Position
A	• Same premium payment, $P_0^* = P_0$. • Realistic when policyholders are unaware of change of default risk through the introduction of a guaranty fund. • NPVequals value of insurer DPO, Π_0^{DPO}.	• Contribution $C_0^* = \alpha P_0$ to the fund (no charge back to policyholders). • NPV is negative. • Incentive to lower equity $E_0^* = E_0^{fair} \leq E_0$ to restore fair situation.	• NPV equals$\Pi_0^{*DPO} - C_0^*$ • Self-financing only if funds equal insurer's value of DPO.
B	• Premium$P_0^* = P_0 + C_0^*$, $C_0^* = \alpha P_0^*$ as fund contribution. • NPV equals to$\Pi_0^{DPO} - \alpha\Pi_0^L/(1-\alpha)$. • If$\alpha > \alpha^{fair} = \Pi_0^{DPO}/\Pi_0^L$, incentive to change to insurer with lower premiums (equity) to restore fair situation.	• No contribution to the fund, $E_0^* = E_0$ • NPV is unaffected. • In practice insurer would collect policyholder contribution and transfer to fund.	• NPV equals$\Pi_0^{DPO} - C_0^*$ • Self-financing only if funds equal insurer's value of DPO($\alpha \geq \alpha^{fair}$).
C	• Premium$P_0^* = \Pi_0^L = P_0 + \Pi_0^{DPO}$ • NPV equals to zero. • Policyholders pay default risk-free premium and get full protection through the combination of insurer and guaranty scheme.	• Contribution $C_0^* = \alpha P_0$ to the fund,$E_0^* = E_0$ • NPV zero if$C_0^* = \Pi_0^{DPO}$ • If situation is unfair, incentive to adapt equity capital (and henceΠ_0^{DPO}) to restore fair situation. Parameter α fixes target solvency level.	• NPV equals$\Pi_0^{*DPO} - C_0^*$ (see setting A). • If situation for insurers is fair, fund is self-financing (adequate value of assets in system equity holder's guaranty scheme).

Of the 15 journals that are studied, the Hato and Wagner model for the contribution to the insurance guaranty fund is the dominant model that was capable to explain the combination of contributions from the policyholder and equity holder with its various impacts to the insurance guaranty fund. Considered as the best contribution model is a model which the policyholder and equity holder together contribute to the guaranty fund. When a policyholder and equity holder make contribution together, then the distribution or risk sharing between the policyholder and the equity holder occurs. Risk sharing between the policyholder and the equity holder is common in the insurance business.

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Risk-based ex-ante premium levied have more positive side for the policyholder, the equity holders and supervisors, though more difficult in application. Hato and Wagner model so far do not include the government's role in the contribution or the management of the insurance guaranty fund. The government's role in the contribution to insurance guaranty fund is elaborated by [Brewer et al., 1997] who support the previous results for guaranty funds effectively funded by taxpayers, for the U.S. life insurance market. A recent example, even though the core insurance business may not have been the main trigger, is the bailout of insurance giant AIG in 2008 [Hato and Wagner, 2013].

3 Proposed Research Model

Insurance guaranty fund is not the same with reinsurance, especially seen from the coverage of the risk and the magnitude of the funds managed related with replacement amount given to the policyholder in case of risk of bankruptcy of insurance companies. The presence of insurance guaranty fund especially for Indonesia was considered crucial and urgent. Although insurance guaranty fund can increase moral hazard (Bohn and Hall, 1999) and in certain degrees, potentially changing the way insurance companies view the risks they are facing (become more liberal), but insurance guaranty fund is believed would raise public confidence to the insurance industry. Further study is needed to make health and strength criteria of an insurance guaranty fund in order to deter the institutions that are created as the protector to become a financial disaster.

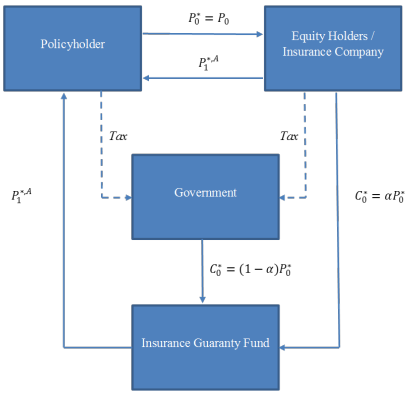

Figure 4: Conceptual Model of Government Roles on Guarant Fund

Illustration of the cash flows with an insurance guaranty fund at times t = 0 and t = 1. Contributions (C_0^*) to the fund at time t = 0 originate from the government and from the insurance company and are not charged back to policyholders, whose initial premium payment $P_0^* = P_0$ is not affected. Government contributes as much as $(1-\alpha)P_0^*$ to cover contribution from insurance company. The indemnity payment to policyholders at time t = 1 comes partly from the insurance company $(P_1^{*,A})$ and the fund $(P_1^{*,F})$

The government's curative role does not need to be equated with the common bailout because the common bailout was paid out ex post, after the crisis happened. On the insurance guaranty fund, government money is only part of the overall funds paid by the guaranty fund to the insurance companies in troubles. Casey and Posner (2015) said that the key feature of the bailout—and the feature that makes people so uncomfortable with bailouts—is that it is ex post. The question then arise whether bailouts can nonetheless be regulated in advance so that the worst types of bailouts are avoided and only good bailouts are implemented

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Risk Management Maturity Model in Indonesian Insurance Industry: Preliminary Survey and Proposed Research Model

Abitani Taim
Doctoral Program in Economics,
Gunadarma University
abitani@gmail.com

Abstract

Experience has shown that risk management provides wealth preservation andgrowth, enhancing reputation regardless of scope, taking into account the fact that the risk is not only a threat, but it also presents opportunities if the insurance company is prepared in time to handle it adequately. The Financial Service Authority of Indonesia (OJK) has issued number of regulation that requires insurance companies in Indonesia to implement risk management practices. This study will use the existing result of structuredquestionnaires surveyed by Milliman Consultant to explore the extent of the application of risk based supervision in insurance companies in Indonesia can mitigate the inherent risksand its impact ontheir business performance from the annual reports of companies are used to see the financial performance of companies.The main objectiveof this paperisto describe the proposedresearch modelused todetermine the factorsthat affectthe level of risk management maturityinthe Indonesian insurance industry.

Keywords :Risk management,Insurance companies,Performance,Insurance market.

1 Introduction

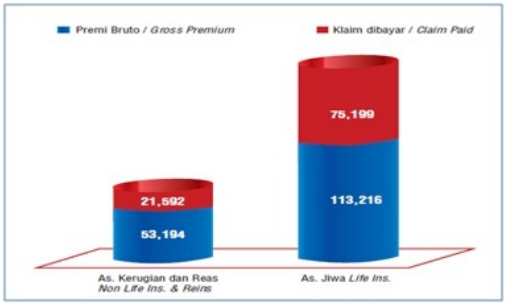
Indonesian economy in 2013, as measuredby Gross Domestic Product (GDP), from Rp8,241.9 trillion in 2012 to Rp 9,084.0 trillionin 2013. Within the same period, gross premiumincome of insurance industry increased by 9.76% from Rp175.89 trillion in 2012 to Rp193.06 trillionin 2013. Thus, in 2013 the ratio of gross premiumto GDP remains the same at 2.13 % from 2012 to 2013.

The insurance and reinsurance companiesconsisted of 49 life insurance companies, 82 non life insurance companies, 4 reinsurancecompanies, 2 companies administering socialinsurance and workers social security program,and 3 companies administering insurance for civilservants and armed forces / police.

Total claim gross paid by insurance industryin 2013 increased by 7.0%, from Rp107.66t rillionto Rp116.31 trillion. Claim paid by non life andreinsurance companies increased by 6% comparedto those in previous year, which is from Rp20.19trillion in 2012 to Rp21.59 trillion in 2013. Claimpaid by life insurance companies increased by 6%compared to previous year, from Rp70.89 trillion toRp75.20 trillion.

Since the end of the Subprime Financial Crisis in 2007-2008, joint venture (JV) life insurance companies in Indonesia havebeen introduced to enterprise risk management implementation by their parent company. The implementation has been enforced by parent company regulators to ensure the same level of assurance has been practiced throughout group to protect stakeholders interest.However, it should be mentioned that this sector still has challenges ahead in perfecting methods and risk management, inorder to achieve the sustainablegrowth of company's value and also the application of regulator requirements. Eventhough, the was study that indicated the risk management does not have significant influence to corporate's performance [Sudaryono, 2012].

In the last two year, The Financial Service Authority of Indonesia (OJK) has issued series of reg-



Note: In Trillion Rupiah, Source: OJK

Figure 1: Gross Claim to Gross Premium In 2013

Table 1: Gross Premium and Gross Domestic Product 2009-2013

Year	Gross Premium		Gross Domestic Product		Ratio
	Total (a)	Growth(%)	Total (b)	Growth(%)	a/b
2009	106,45	17,9	5613,44	13,4	1,90
2010	125,12	17,5	6422,90	14,4	1,95
2011	153,13	22,4	7427,10	15,6	2,06
2012	175,89	14,9	8241,90	11,0	2,13
2013	193,06	9,8	9084,00	10,2	2,13

Note: in Trillion Rupiah, source: OJK

Table 2: The Growth of Total Insurance Companies 2009-2013

No.	Description	2009	2010	2011	2012	2013
1.	Life insurance	46	46	45	47	49
	a. National Private	28	29	26	28	30
	b. Joint Venture	18	17	19	19	19
2.	Non Lufe Insurance	89	87	85	84	82
	a. National Private	69	69	66	66	65
	b. Joint Venture	20	18	19	18	17
3.	Reinsurance	4	4	4	4	4
	a. National Private	4	4	4	4	4
	b. Joint Venture	-	-	-	-	-
4.	Companies AdministeringSocial Insurance and Workers Social Security Program	2	2	2	2	2
5.	Companies Administering Insurance for Civil Servant and Armed Forces	3	3	3	3	3
6.	Total (1 to 5)	144	142	139	140	140

Source: OJK

ulation related to risk management as follows: (1) POJK NO. 2/POJK.05/2014 regarding Good Corporate Governance in Insurance Company; (2) POJK NO. 10/POJK.05/2014 regarding Risk Assessment of Non Bank Financial Institution; (3) POJK NO. 11/POJK.05/2014 regarding Direct examination of Non Bank Financial Institution; (4) POJK NO. 17/POJK.03/2014regarding Implementation of Integrated Risk Management in Financial Conglomerates; (5) POJK NO. 18/POJK.03/2014regarding Implementation of Integrated Governance in Financial Conglomerates; and (6) POJK NO. 1/POJK.05/2015regarding Implementation of Risk Management of Non Bank Financial Institution.

These regulation shows the high interest of the regulator on the implementation of risk management in insurance industry. Demands of regulatory and supervisory authorities may have a significant effecton the insurance companies to help improve their practice of the risk management, which is very important for the properdevelopment of all insurance industry [Zhara and Mazreku, 2014].

Recent Milliman in colaboration with Prudential Indonesia conducted survey among the life and non life insurance companies on the implementation of Risk Based Supervision for the first time. The survey drew responses from 57 participants, comprising local and JV entities as well as conventional insurers and syariah operators.Where the more than 43% of the respondend was JV entities and 30% are General Insurance companies.

The aim of this paper is to bring out a brief study on the importance of the development of enterprise risk management in insurance companies and their maturity level.

2 Literature Review

The Insurance has been used as a risk mitigating and help us in managing the risks faced in almost all aspects of our daily life. By referring to the descriptions of risk by several researchers and its historical development, it can be summed that insurance is the backbone to mitigate majority of risk encountered by us [Salman, 2014].Insurance companies are facing the challenges ofbalancing risk exposure with protection of the insuredfrom the consequences of adverse events[Ilić and Obadović, 2011].According to the study conducted by KPMG in 2002, in most cases, the cause for the bankruptcies of insurancecompanies has not been to a single factor , but rather due to a combination of internal and external factors. A commonreason for bankruptcy of an insurance company is a combination of poor quality

Table 3: Gross Premium by Insurance Sectors 2009 – 2013

Year	Non Life \& Reinsurance	Growth (%)	Life	Growth(%)	Social Ins. \& Workers Social Security Program	Growth (%)	Ins. For Civil Servants & Armed Forces/Police	Growth (%)	Total
2009	28,98	7,6	61,73	22,5	5,10	17,6	10,63	22,7	106,45
2010	32,05	10,6	75,54	22,4	5,73	12,4	11,80	11,0	125,12
2011	38,83	21,2	93,99	24,4	6,75	17,8	13,54	14,8	153,13
2012	44,91	15,7	107,94	14,8	7,81	15,6	15,23	12,5	175,89
2013	53,19	18,4	113,22	4,9	10,35	32,5	16,31	7,1	193,06

Note: In Trillion Rupiah, source: OJK

management procedures and inadequaterisk management dealing with major risks to which the company is exposed.

Enterprise Risk Management (ERM) has emerged as a new risk management technique aimed to manage the portfolio of risks that faces an organization in a integrated, enterprisewidemanner. Unlike traditional risk management, where individual risk categories are managed froma silo-based perspective, ERM involves an holistic view of risks allowing to take into accountcorrelations across all risk classes (Monda, 2013).Objective of risk management is to reduce different risks related to a pre-selected domain to anacceptable. It may refer to numerous types of threats caused by environment, technology, humans,organizations and politics. The different steps in the risk management process whichmethods are used in the different steps, and provides some examples for risk and safety management [Berg, 2010].

Industry insiders tout enterprise risk management (ERM) as the most effectivestrategy an organization can use to manage a plethora of risks, running the gamutfrom strategic, market, credit, operational and financial exposure to the dauntingarray of man-made and natural disasters [Banham, 2005].This fact highlights the need for adequateinternal models to assist in the process of risk management.Enterprise risk management deals with risks and opportunities affecting value creation orpreservation, defined as follows:

"Enterprise risk management is a process, effected by an entity's board of directors,management and other personnel, applied in strategy setting and across theenterprise, designed to identify potential events that may affect the entity, and managerisk to be within its risk appetite, to provide reasonable assurance regarding theachievement of entity objectives [COSO, 2004]"

The definition reflects certain fundamental concepts. Enterprise risk management is: (a) A process, ongoing and flowing through an entity; (b) Effected by people at every level of an organization; (c) Applied in strategy setting; (d) Applied across the enterprise, at every level and unit, and includes taking an entitylevel portfolio view of risk; (e) Designed to identify potential events that, if they occur, will affect the entity and tomanage risk within its risk appetite; (f) Able to provide reasonable assurance to an entity's management and board of directors; and (g) Geared to achievement of objectives in one or more separate but overlappingcategories.

The risk management failures can be categorised into two: operational failure and operators' failure. The implication for practice suggests that risk management is an integral part of the decision-making process and ERM can improve business performance, thereby minimising possibilities of business failures in Nigeria [Fadun, 2013]. According to[Önder and Ergin, 2012], profitabilityof the companies do not have any significance in ERM applications while the mostimportant factors that affect the applications were found to be leverage and company size.

The risk managementpractices and corporate governance compliance have an effect on shareholder value only on certain aspect of risk management variables, although indicated that the ERM was not the main factor that led to value creation[Manab and Ghazali, 2013].There is positive relation between firm value and the use of ERM. The ERM premium is statistically and economically significant and approximately 17 percent offirm value (Hoytet.al, 2008).

The POJK NO. 10/POJK.05/2014 on Risk Assessment of Non Bank Financial Institution requires insurance company to assess their risk level (Risk Based Supervision - RBS) on the following areas: (1) Management Risk, (2) Governance Risk, (3) Strategy Risk, (4) Operational Risk, (5) Asset and Liability Risk, (6) Capital Risk, and (7) Insurance Risk. Each risk area will be assesed using the risk rating defined in the OJK Guidelines on RBS Self Assessment. The risk scores are categorized in five classifications and probability rating. The risk

scores are group in certain range of starting from 0.0 to 1.0; more than 1 to 1.5; more than 1.5 to 2.0; more than 2.0 to 3.0 and more than 3.0 to 4.0. The probability rating follows the grouping of the risk scores.

Table 4: The RBS Probability Rating

Risk Score	Probability Rating
0.0 < RS ≤1.0	Low
1.0 < RS ≤1.5	Medium Low
1.5 < RS ≤2.0	Medium High
2.0 < RS ≤3.0	High
3.0 < RS ≤4.0	Very High

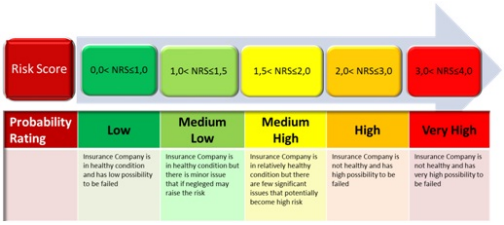


Figure 2: RBS Assessment Rating Criteria[Keuangan, 2015]

The methodology of calculation of company's Risk Assessment using the template given by the OJK completed in as softcopy format. User just ned to input their scores into the template and the template will automatically calculate the overall risk score and the risk level. Below is the sample of the template as defined in by OJK.

3 Preliminary Survey

To analyze the extent and effects of the application of risk management in the insurance industry in Indonesia, it has been used traditional methods of research, specifically; this study has been done through questionnaires result and reports from the relevant institutions. The questionnaires have been distributed to the participants of thisStudy in person by the researcher and also through electronic communications.

The overall research has been sent to all Insurance Companies in Indonesia electronically. However, out of 140 registered companies, only 57 companies have responded. Although, the target companies to be included in the studyare all licensed in Indonesia, the majority of the companies that answered the questionnaire areJoint Venture Companies.As a result, it should be paid attention on attempting to generalize the findings of this paper. Based on the survey result, about 55% respondent indicated ther Total Risk Score as Medium Low (1.0 < RS ≤ 1.5) and none indicated as Very High (3.0 < RS ≤4.0). However, if we look at the risk score by individual risk modules, the majority of respondents indicate risk score as Low (0.0 < RS ≤1.0).

Through the question "Please indicate the top three risks that your organisation is currently prioritising, independent to tha actual scoring that your process calculated for those risks". Both JV and local insurance companies indicates the top priorities are Operational Risks. This can be intepreted as they have identified some room for improvement in Operational area, eventhough they have assessed their risk score as low in the Operational Risk.

There are more than 70% of JV or local insurance respondent either already or plan to integrate the RBS concept in their Risk Management Framework. Completing the exercise of RBS submission has triggered the organisation to hire more staff or upskill they staff accros the organisation to Risk Management as the top actions of the most of respondents.

Overall perception of the most respondent of the survey felt positive about the RBS concept and submission, eventhough about 90% of the respondent felt that the OJK should provide more guidance.

Findings from this study suggest that the demands of regulatory and supervisory authorities may have a significant effecton the insurance companies to help improve their practice of the risk management supports the statement of [Zhara and Mazreku, 2014]. In the growing insurance market in Indonesia, the OJK has take strong initiative in order to have better supervision of the insurance industry by enforcing series of risk management regulation. Indonesia with very large under insured market very big potential to grow and atract more investor.

Data from the study shows that risk management in insurance companies face problems that are as a result of the lack of experience and the transition phase that our country isfacing.Implementation Risk Management in insurance companies in Indonesia still in the initial stage and to more effective use of risk management models forinsurance companies is the education of leading managers on the importance and necessity of the managerial function.

4 Proposed Research Model

Proposed Research Model for this study is taking the examples in Insurance Companies Indonesia as a starting point, to establish thefactors that influence ERM applications of enterprises andstudy correlations between ERM applications and variables of profitability, leverage and company size were searched forand an explanation was made to define effects of these variables on ERM applications.

Employment of a high level director as a risk manager or chief risk officer, which isaccepted to be an indicator of ERM applications and searching for statistically significantcorrelations of these

Risk Moduls		Risk Score (RS) C	Weight D	Net Risk Score (RS * Weight) E=C * D
1. Management (Board)		1.5	10%	0.51
2. Governance		1.6	15%	0.98
3. Strategy		C = (A+B)/2 2.7	15%	5.31
3.1 Inherent Risk A	2.9			
3.2 Management & Control B	2.5			
4. Operational		1.6	15%	1.31
4.1 Inherent Risk	1.1			
4.2 Management & Control	2.1			
5. Asset & Liability		3.0	20%	12.15
5.1 Inherent Risk	2.9			
5.2 Management & Control	3.1			
6.Insurance		2.0	25%	4.8
6.1 Inherent Risk	2.9			
6.2 Management & Control	1.1			
			100%	25.06 = F
Total Net Risk Score				**2.24 = G**
Capital or Funding				
a. Capital Ability		1.2	50%	1.04
b. Capital Addition		1.3	45%	1.43
			100%	2.47 = H
Total Capital Support Risk Score				**1.25 = I**
Weight of Net Risk Score and Capital Support Score = 3/5 : 2/5				
Total Overall Risk Score				**2.05 = J**
Risk Level				**High**

Figure 3: . RBS Assessment Template[Keuangan, 2015]

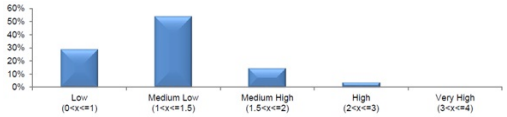


Figure 4: Total Risk Score

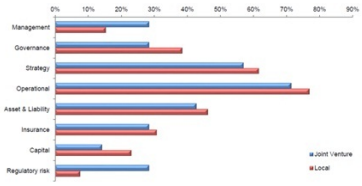


Figure 5: Top Three Risks

applications with profitability, leverage, company size in businesseswere taken as the topic of this study where the following model was formulated and analysis was performed to this end 1:

$$RMMaturity = \beta 0 + \beta 1 CRO + \beta 2 Lev + \beta 3 Size + \beta 4 Pro + \beta 4 Sec + \varepsilon \quad (1)$$

In establishment of this model the models and variables used in the studies of [Hoyt and Liebenberg, 2008] are [Önder and Ergin, 2012]were taken as the basis.In the proposed research a new variable will be introduced as dependent variableto test correlation between Insurance Sector and ERM Maturity.The proposed sampling unit for analysis are insurance companies registered in OJK. There are total 140 Companies.

In this model a positive correlation was esteemed between the independent variables and the dependent variable.Proposed Independent Variables areLeverage (Lev),Company Size (Size), Profitability (Pro),and Ownership (Own) as well as Chief Risk Officer (CRO) andInsurance Sector (Sec) as dummy variable. Dependent Variable is Risk Management Maturity which adapted from

Figure 6: Top Actions Plan

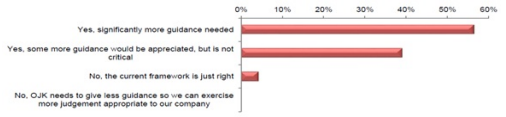


Figure 7: Respondent Perception on OJK Guidance

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Development of Cross-Cultural Business Communication

Barno B. Islamova
Tashkent Branch of Russian Economic
University after G.V. Plekhanov

Abstract

The author of the article presents main issues about importance of researching cross-cultural communication, verbal and non-verbal forms of communication during studying foreign languages as professional communication language.

Keywords : verbal and non-verbal forms of communication, intercultural communication, business communications.

Development of cross-cultural competence is included into the category of the most actual tasks today for modern society which becomes more multiethnic. In this situation the important direction in teaching foreign languages as language of professional communication is development of such qualities are:

- Openness to knowledge of foreign culture and perception of psychological, social and other cross-cultural distinctions
- Spirit of cooperation with representatives of other culture
- Ability to differentiate collective and individual in communicative behavior of representatives of other cultures
- Ability to overcome stereotypes
- Readiness for modification of communication applied in native culture
- Possession of a set of communicative means and their right choice depending on a communication situation (tone, style, strategy, speech genres, subject).

There are some ways to prepare the individual for cross-cultural interaction. They can be divided into three groups:

- According to training method - didactic and empirical
- According to the content of training - common cultural or cultural and specific
- According to the sphere in which there tried to reach the main results - cognitive, emotional, behavioral.

Methods of training of the individual can be didactic – education, orientation and instructing, and empirical – training. Education represents process of acquisition of knowledge to culture, contact with which the person purposefully prepares.Effective communicators have many tools at their disposal when they want to get across a message. Whether writing or speaking, they know how to put together the words that will convey their meaning. They reinforce their words with gestures and actions. They look you in the eye, listen to what you have to say, and think about your feelings and needs. At the same time, they study your reactions, picking up the nuances of your response by watching your face and body, listening to your tone of voice, and evaluating your words. They absorb information just as efficiently as they transmit it, relying on both non-verbal and verbal cues.

The most basic form of communication is nonverbal. Anthropologists theorize that human beings used words to talk things over, our ancestors communicated with one another by using their bodies long before. They gritted their teeth to show anger; they smiled and touched one another to indicate affection. Although we have come a long way since those primitive times, we still use non-verbal cues to express superiority, dependence, dislike, respect, love, and other feelings.

Non-verbal communication plays a role in business too. For one thing, it helps establish credibility and leadership potential. If you can learn to manage the impression you create with your body language, facial characteristics, voice, and appearance, you can do a great deal to communicate that you are competent, trustworthy, and dynamic. For example, Wal-Mart founder Sam Walton has developed a homespun style that puts people at ease, thereby helping them to be more receptive, perhaps

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even more open.

Furthermore, if you can learn to read other people's non-verbal messages, you will be able to interpret their underlying attitudes and intentions more accurately. Dealing with co-workers, customers, and clients, watch carefully for small signs that reveal how the conversation is going. If you aren't having the effect you want, check your words; then, if your words are all right, try to be aware of the non-verbal meanings you are transmitting. At the same time, stay tuned to the non-verbal signals that the other person is sending.

When it comes to sending business messages, speaking is more common than writing. Giving instructions, conducting interviews, working in small groups, attending meetings, and making speeches are all important activities. Even though writing may be less common, it is important too. When you want to send a complex message of lasting significance, you will probably want to put it in writing.

It's important to remember that effective communication is a two-way street. People in business spend more time obtaining information than transmitting it, so to do their jobs effectively; they need good listening and reading skills. Unfortunately, most of us are not very good listeners. Immediately after hearing a ten-minute speech, we typically remember only half of what was said. A few days later, we've forgotten three-quarters of the message. To some extent, our listening problems stem from our education, or lack of it. We spend years learning to express our ideas, but few of us ever take a course in listening.

The most important part of this process is interpretation and evaluation, which is no easy matter. While absorbing the material, we must decide what is important and what isn't. One approach is to look for the main ideas and the most important supporting details, rather than trying to remember everything we read or hear. If we can discern the structure of the material, we can also understand the relationships among the ideas.

The first step in learning to communicate with people from other cultures is to become aware of what culture means. Our awareness of intercultural differences is both useful and necessary in today's world of business.

Person may not realize it, but he belongs to several cultures. The most obvious is the culture he shares with all other people who live in the same country. But this person also belongs to other cultural groups, such as an ethnic group, a religious group, a fraternity or sorority, or perhaps a profession that has its own special language and customs. So what exactly is culture? It is useful to define culture as a system of shared symbols, beliefs, attitudes, values, expectations, and norms for behavior. Thus the person, who wants to learn another culture, should have similar assumptions about how people of another culture think, behave, and communicate.

Cultures and subcultures vary in several ways that affect intercultural communication are as follows.

- Stability. Conditions in the culture may be stable or may be changing slowly or rapidly.
- Complexity. Cultures vary in the accessibility of information. In North America information is contained in explicit codes, including words, whereas in Japan a great deal of information is implicitly conveyed, through body language, physical context, and others.
- Composition. Some cultures are made up of many diverse and disparate subcultures; others tend to be more homogeneous.
- Acceptance. Cultures vary in their attitudes toward outsiders. Some are openly hostile or maintain a detached aloofness. Others are friendly and co-operative toward strangers.

So, we can see that cultures vary widely. It's no wonder that most of us need special training before we become familiar with anotherculture.

When we arefaced the need (or desire) to learn about another culture, we have two main approaches. The first is to learn as much as possiblethe language, cultural background and history, social rules, and so onabout the specific culture that you expect to deal with. The other is to develop general skills that will help to adapt in any culture.

The first approach, indepth knowledge of a particular culture, certainly works. But there are two drawbacks. One is that we will never be able to understand another culture completely. The second approach to cultural learning, general development of intercultural skills, is especially useful if we interact with people from a variety of cultures or subcultures. Among the skills we need to learn are the following.

- Taking responsibility for communication. Don't assume that it is the other person's job to communicate with you.
- Withholding judgment. Learn to listen to the whole story and accept differences in others.
- Showing respect. Learn the ways in which respect is communicated through gestures, eye contact, and so on in various cultures.
- Empathizing. Try to put yourself in the other person's shoes. Listen carefully to what the other person is trying to communicate; imagine the person's feelings and point of view.
- Tolerating ambiguity. Learn to control your frustration when placed in an unfamiliar or confusing situation.

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- Looking beyond the superficial. Don't be distracted by such things as dress, appearance, or environmental discomforts.
- Being patient and persistent. If you want to accomplish a task, don't give up easily.
- Recognizing your own cultural biases. Learn to identify when your assumptions are different from the other person's.
- Being flexible. Be prepared to change your habits, preferences, and attitudes.
- Emphasizing common ground. Look for similarities to work from.
- Sending clear messages. Make your verbal and non-verbal messages consistent.
- Taking risks. Try things that will help you gain a better understanding of the other person or culture.
- Increasing your cultural sensitivity. Learn about variations in customs and practices so that you will be more aware of potential areas for miscommunication or misunderstanding.
- Dealing with the individual. Avoid stereotyping and overgeneralization.

The more differences between the people who are communicating, the more difficulties are in communication. The major problems in cross-cultural business communication are language barriers, cultural differences, and ethnocentric reactions.

Development, understanding and acceptance of mentality of people living nearlyisthe important requirement of time. It is very important, especially now,when mixture of people, languages, cultures reached unprecedented scope and there was a problem of education of tolerance to foreign cultures, awakenings of interest and respect for them, overcoming in itself feelings of irritation from redundancy, insufficiency or simply dissimilarity of others cultures. It caused general attention to questions of intercultural, international communication. In process of successful organization of work in labor market the important part has to be assigned to establishment of business, partner, worthy interpersonal relations in cooperation on the basis of mutual respect and understanding national features and traditional values: education, cultural, political and religious views.

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Business Efficiency and Quality of Training of Specialists

Maria Ya. Khodjaeva
PhD associate professor
Tashkent Branch of Russian Economic
University after G.V. Plekhanov,
Republic of Uzbekistan

Abstract

Interrelation of business performance and quality of training of specialists is obvious, but demands in-depth study in modern conditions, as it has multidimensional essence. Scientists and practitioners admit unanimously the objectivity of human resources development as subject of the research of strategic perspective in all spheres of economy. Competitiveness of human capital resources is formed in the course of education. Today vital issue is availability of creative factor both in business management, and in the organization of educational process.

Keywords : efficiency, business, education, economy, creativity, educational process, competence, system, competitiveness, market.

1 Introduction

Enhancement of efficiency of production is an urgent issue. Increase of efficiency is a problem of today. This problem is urgent for enterprises, regions and economy in general. Basis of increase of effectiveness is staff of the company.Professional development of employees is a task of management of the company. Personnel are a resource of efficiency increase.Economists, lawyers, sociologists, psychologists deal with this issue. It is a range of interests of government bodies and public organizations.These issues are solved at national and international levels.

Increase of role of the personnel in business is an actual issue in economic science.Currently there discussed problem of terminology. There often applied a term "human resources". It influences on the content of management.New methods of management are developing. Quality of human resources is becoming an important aspect of management.

Quality of human resources is competence, knowledge, skills and health of workers. In this regard the role of education is increasing.

In modern economic science there widely investigated the following aspects:

- common for all branches, levels and forms of ownership – organizational, legal, financial, technical and technological, market and marketing;
- characteristic feature for a level of management of human resources, and their motivations in firms, concerns, state corporations, ministries and departments, public organizations, at regional and macroeconomic levels, etc.; and
- reflecting the system of values and complex of opportunities of a modern person.

These aspects are revealed in scientific works of Abdurakhmanov K. Kh., Alimov R. A., Bedrintsev A.K., Gulyamov S. S., Dosumov R. Ya., Zaynutdinov Sh. N., Ziyadullayev S. K., Iskanderov I. I., Kabulov V. K., LapkinK.I., Khikmatov A. Kh., Zokirova N. K., Maksakova L.P. and many others.

The following tendencies arecharacteristicfor the present stage:

1. development of value of personnel qualification and increase of the share of skilled workers.It is reflected on development and improvement of systems of motivation and control. Efficiency of material incentives decreases and importance of social and spiritual incentives increases;
2. rise of role of tools of management and there is developing business environment as well;
3. globalization of labor markets, resources and goods;
4. formation of qualitative characteristics of workers (competences) and systems of their motivation;
5. decrease in labor costs in total amount of costs on production and realization. Growth of in-

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vestments into human capital, development of organizational culture;

6. reflection of demographic processes on structure of human resources and social and economic problems.

Main goal of human resource management is formation of competences. Competence is formed in educational environment.

Modern education system is formed within the limits of state innovative and investment policy. Education system realizes interests of society, state and business1.

The basic principles of state policy in the field of education are:

- humanistic and democratic nature of training and education;
- continuity and succession of education;
- obligatoriness of secondary education, secondary special education and professional education;
- availability of education within the state educational standards;
- secular nature of education system;
- encouragement of education and talent;
- combination of state and public administration in education system.

In modern conditions tasks of producers of educational serviceswill become:

- forecasting of changes of state of labor market;
- identification and formation of potential requirements;
- providing high-quality educational services;
- ensuring competitiveness of educational institution in domestic and world markets.

In turn, high competitiveness of national higher educational institutions is a factor of competitiveness of the country.

Foundation for full use of market principles in development of education is laid by National program for training in the Republic of Uzbekistan.

As priority direction in the Program there provided for:

- formation of competitive market of educational services;
- development of state and non-state educational establishments;
- state regulation of educational services market;
- development of the system of paid consulting and additional educational services.

The purpose of the system of higher education – training of highly qualified specialists (Fig. 1).

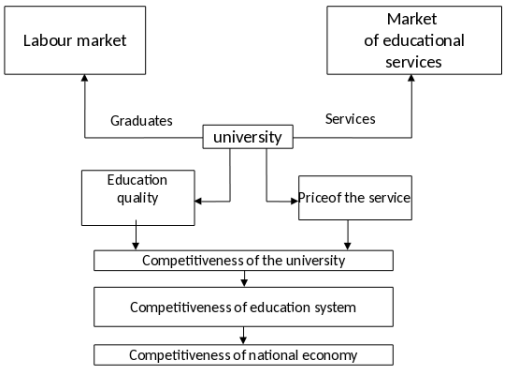

Figure 1: University as a subject of market relations

Conclusion: modern market of educational services of Uzbekistan develops according to global tendencies of integration of education, science and business.There is approachment of business and state. Interests of business and state are crossed regarding improvement quality ofeducation.There occurs consistent integration of education system of Uzbekistan into global educational space. The market of educational services, as all education system represents a strategic factor of competitiveness of the country (Fig. 2.).

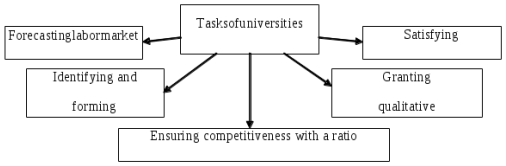

Figure 2: Tasks of educational institutions in the market of educational services

Education is a factor of competitiveness in strategic perspective in the modern world. Both government and international organizations deal with the issues of education quality. Education is a sphere in which intellectual potential of the country is formed.

In the modern world education plays the role of major factor of social and economic progress of society. The interest in development of the market of educational services constantly increases in scientific community that is defined by a number of aspects.

First, educational services market turned into objective economic reality becoming integral element of economy.

Secondly, in modern conditions the market of educational services turned into a large sphere of economy where there created a part of national wealth.

Education system created in the Republic of Uzbekistan is a basis for development of the market of educational services. It provides free compulsory primary and secondary education for all population of the country. There created conditions for formation of competitiveness of professional personnel at the level of high school and postgraduate education.

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Modernization and Development of Information and Communication Technologies of Railway Transport in Uzbekistan

Nailya R. Asadullina
PhD, associate professor, Tashkent
Branch of Russian Economic
University after G.V. Plekhanov
Republic of Uzbekistan

Ismailkhodjaev A. I.
2PhD, associate professor, Tashkent
Institute of Railway Transport
Engineers
Republic of Uzbekistan

Abstract

This article discusses modernization and development of railway transport is aimed at ensuring the increasing demand for freight and passenger traffic in the growing economy of Uzbekistan in compliance with high quality standards of consumer service using information and communication technologies.

Keywords :modernization, information and communication technologies, railway transport, competitiveness of services, integration into the world community, corporate network, railway transit stations.

Modernization of industries is one of priorities of political, economic and legal development of industrialized countries in the nearest future. Today in Uzbekistan there made targeted measures for further development of information and communication technologies, thereby strengthening political and economic independence of the country; it provides active integration into the world community.

In Uzbekistan, the rapidly growing high-tech and market services, such as telecommunications services and information for the last year increased by 24.5%, computer programming 18%. According to the results of the analysis it is determined that 96.7% of the state authorities of the Republic have official web pages. For 85.7% of central administrative bodies and 62% of structural units, there are local computer networks.

In the modern development of the industry of Uzbekistan was the adoption of the Resolution of the President No PP-2158 on April 3, 2014. According to the document the list of priority projects in the country was approved to introduce ICT in the real economy, which has a total of 86 projects worth 336.0 billion. UZS.

The President set important goals and trends of ICT development in real economy, widespread introduction of ICT, mainly of domestic production, document management system of accounting and reporting of financial and economic activity of associations and enterprises, human resource management, organization of production and technological processes.

Modernization and development of railway transport is aimed at ensuring the increasing demand for freight and passenger traffic in growing economy of Uzbekistan in compliance with the highest standards of quality in customer service. This is possible through the efficient functioning and modernization of railway transport, constant updating of equipment, introduction of modern technologies of repair of service vehicles, transfer devices and infrastructure, improving the processes of organization of labor and management in railway transport. Today in Uzbekistan there conducted targeted measures for further development of transport capacity, thereby strengthening political and economic independence of the country; it provides the active integration into the world community. In particular, the construction of new railway lines in the country, there carried out reconstruction and electrification of the main transit railway sections, organization of new routes and formation of container trains in order to open customer-oriented, short and convenient ways of transportation.

The President of Uzbekistan Islam Karimov noted: "as a result of consistent implementation of the adopted program of priority development of the industry in 2011-2015 and sectoral programs on modernization, technical and technological renewal of production in the industrial structure the processing industry, producing competitive products with high added value takes the more important place".

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At present there are also works on electrification of railway sections Marakand-Karshi and Karshi-Termez, which is crucial for the further development of the economic potential of the southern regions of the country.

Construction of new electrified railroad Angren-Pap with seal of 19-kilometer railway tunnel, which does not only reliably connect the central part of Uzbekistan and Ferghana valley, ensure the completion of creation of unified throughout the country railway transport system, but will also serve as an important link in the transnational transport corridor linking Europe with Asia.

At present the Program of development of information and communication technologies of "Uzbekistan Railways "has been elaborated for the period up to 2015. This program provided for the introduction of modern ICT in all sections of the company. For managers responsible for activities of the company as a whole, must be a broader vision of the problems and prospects associated with introduction of ICT in different areas of business and management of long-term development of ICT in enterprises of railway transport.

Within the framework of the Complex program of development of national information and communication system of the Republic of Uzbekistan for 2013-2020 perspective projects for further development of ICT in close collaboration with the program of modernization, technical and technological rearmament are set in the company. The priority areas for development of ICT for the company are implementation of the following projects:

- construction of data transmission network based on fiber-optic lines; - introduction of remote control systems of power supply facilities on SKADA electrified sections; - introduction of satellite technology of operation control of the rolling stock; - modernization of information systems.

The company uses such technologies as ASOTM-2, ALP of stock cashier, ASM of locomotive depot, ASM of train depot, ALP of Integrated processing of route drivers, ASM of fuel-storage facilities and many other technologies as the automated system of operational traffic management (ASOTM), automated databank of the carriage sparks (ADBCP), carriages model, train model, container model, a significant number of ALPs. All of these technologies are aimed at ensuring the transportation process, improve the quality of customer service, increase traffic safety, etc.

To improve the efficiency of cooperation with the State Customs Committee the company is developing Unified automated information system control of railway traffic. The system will automate the transfer of advanced cargo information requiring customs procedures. In future, all components of the Unified information data transfer network of "Uzbekistan Railways" as a single complex creates the modern, high effective, manageable system of information transmission that meets modern requirements, able to ensure the integration of all network devices of "Uzbekistan Railways".

The considerable attention is also paid to updating of computer equipment. Every year significant financial resources are allocated to it.

The company also works on creation of corporate data transfer network - now construction of local network in the headquarters of the company has been completed and pre-project survey of railway body Tashkent is going on to build local networks and then combining them into a single corporate network.

For successful exploitation of automated systems there built 1263 km of fiber-optic communication lines. For creation of unified corporate data transfer network there planned construction of 1378 km of fiber optic links between Angren-Pap-Kokand-Andijan, Kumkurgan Termez, Navoi-Kanimekh-Misken and Misken-Kararakalpakstan. Thus, coverage of fiber-optic lines will make 63%.

Further development of information and communication technologies will improve the competitiveness of railway transport and expand the area of customer service, which will increase the company's revenues from core activities and create conditions to reduce the cost of transportation and transportation costs.

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Construction of Social Opinion about Precidential Candidata Convesion of Democrat Party on Online Media

Prihantoro
Universitas Gunadarma
prihantoro@staff.gunadarma.ac.id

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Private Property Under The State Protection

Sh Ergashhodzhaeva
Tashkent State University of Economics

B. Berkinov
Tashkent State University of Economics

Abstract

From the first years of independence in Uzbekistan stage by stage carrying out wide-ranging reforms to create a favorable business environment for the priority development of small business and private entrepreneurship, financial and economic support. As a result, every year in Uzbekistan improving the business environment, prevents barriers of doing business.

Keywords : private property, business environment, small business, private entrepreneurship

As evidence of this in the following quote from the report of our President Islam Karimov at the meeting of the Cabinet of Ministers which was held in January 17, 2015: " In 2014 Uzbekistan's rate which characterized business conditions rose to eight positions, and taxation –61 position. According to the UNDP, Uzbekistan joined the top ten countries by number of reforms in the area of ease of doing business for the last year. "However, the Uzbek government continues to introduce the practice of decisive actions to support the development of private property and private entrepreneurship, reliable protection of their rights.

In Uzbekistan for the development of this sphere only in the period of 2012-2014 were adopted more than 15 laws, orders of the President and decrees of the Cabinet of Ministers and other legislative acts. As a result, the share of small business and private entrepreneurship in the GDP has reached the level of many foreign countries.

The analysis of statistical data shows that in 2000 in the small and micro-enterprises per one employee produced goods (services) in the amount of 5.8 million Uzsums, but in 2014that was 27.3 million Uzsums. During this period, the production of small and micro enterprises in per worker increased by 4.7 times, the share of GDP of small businesses and private entrepreneurship increased from 31 percent to 56.1 percent.

Today, decree of the president "On measures to provide reliable protection of private property, small business and private entrepreneurship, the removal of barriers to their rapid development "has been widely discussed among the population and entrepreneurs. By this decree approved the Program of measures providing for implementation mainly in 2015, 33 specific actions on 4 key areas to ensure reliable protection of private property, small business and private entrepreneurship, prevents barriers to their rapid development. The program includes the implementation of measures in the following areas:

- Increasing responsibility, including criminal responsibility of government officials, legislative bodies and regulatory authorities for obstruction and illegal interference in entrepreneurial activity, violation of private property rights;
- Strengthening guarantees for the protection of private property, the consistent continuation of the process of liberalization of administrative and criminal law.
- Expansion of financial and economic support for the rapid development of private property and private entrepreneurship, improvement of the business environment.
- Carrying out audits of small businesses and farms activities routinely once in 4 years and other undertakings once every 3 years.
- If a person committed a crime on taxes and other payments for the first time will make payments on all damages caused to the state within 30 days, then it does not open a criminal case, and they are exempt from liability.
- Organization of the system for the punishment of persons accused of violating the guarantees of freedom of entrepreneurial activity.
- Organization under hokimiyat the center for public services to the enterprises, based on the principle of "one window".

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Implementation of measures in these areas mentioned in the program in 2015, is entrusted mainly to the Ministry of Justice, General Prosecutor's Office, Supreme Court, Supreme Economic Court, the Ministry of Economics, Ministry of Finance, Central Bank, the Chamber of Commerce, Ministry of Internal Affairs, State Committee for Competition, State Tax Committee, the State Customs Committee, the Ministry of Foreign Economic Relations, Investments and Trade, the Ministry of Information Technologies and Communications, National Council for the coordination of regulatory authorities, State Joint Stock Company (SJSC) "Uzbekenergo" Agency "Uzkommunkhizmat", Uzbek Commodity Exchange, State Statistics Committee, State Committee for Land Resources, Geodesy and Cadaster, State Committee of Architecture and Construction, the Council of Ministers of the Republic of KarakalpakStan, regional and hakimiyaty Hakim of Tashkent city, as well as other concerned ministries and departments.

The analysis of the nature and content of the measures approved by the Decree demonstrates its focus to the further ensure the priority development of private property, small business and private entrepreneurship in Uzbekistan, expansion of private business entrepreneurs, as well as the firm protection of their rights.

Distinctive features are in the following.

1. *Firstly*, envisage increasing responsibility, including criminal responsibility of government officials, legislative bodies and regulatory authorities for obstruction and illegal interference in entrepreneurial activity, violation of rights of private property owners. Such legal norms aimed at ensuring the protection of private property in the legislation of Uzbekistan were not previously foreseen. Legal norms in this direction will have its presentation in the Criminal Code, the Civil Code of the Republic of Uzbekistan and other laws, as separate regulations and rules.

2. *Secondly*, the further liberalization of institutional norms to protect the rights and legal interests of economic enterprises, including small businesses and private entrepreneurs. In particular, simplified procedure for treatment of entrepreneurs in court, checking initiated criminal proceedings carried out with the participation of lawyers entrepreneurs. A person who has committed crime for the first time, exempt from criminal liability, if it is within 30 days, he will fully reimburse the damage to the state after the disclosure of the crime; legal violations committed in trading and dealing activities are transferred from the jurisdiction of the criminal case into the administrative proceedings; in the case of full compensation the material damage resulting from the concealment of bankruptcy and false bankruptcy, such persons are not have imprisonment punishment. One more of the institutional norms, introduced in practice in the field of liberalization of the legislation protection of business - is ordering controlling that impede development and bring losses to business, so clear deadlines and criteria checks. On this basis, since July 1, 2015 small enterprises and micro-farms are checked every 4 years, other entities - once in 3 years. Checks for any other purposes other than audits financial-economic activity reduced from 30 days to 10 days. However, the legislation is liberalizing, in particular the Criminal Code introduced articles on the application of the rules of mitigating punishment. They also include penalties for illegal receipt of material compensation or abuse of his position.

3. *Thirdly*, today, instead of individual public services which are carried out by different organizations, working on the principle of "one window" created on the basis of inspections on registration of business entities in the hokimiyat districts (cities), the single centers for providing the principle of "one window". Organization of this single center provided by introduction of mechanisms to simplify the provision of public services, reduce as far as possible the number of required documents and terms of service, transparency of serving entities. However, the reduced provision of unnecessary documents for a business. For the purposes of realizing commercial activities for individual entrepreneurs the order of registration for imported goods was canceled in the Ministry of Foreign Economic Relations, Investments and Trade, as well as the State Customs Service as the body of foreign economic activity, and the number of documents, acting for these purposes will be reduced. In addition, further perfected the procedure for obtaining permits for entrepreneurs and allotment of land for construction. To do this, the procedure is implemented prior notice of the registration of the construction in the regional State Inspection of Architecture and Construction Supervision and obtaining the necessary documents. Simplified mechanisms to ensure the connection of businesses to engineering and communication networks, the procedure for state purchases of goods and services produced by entrepreneurs. In the framework of "e-power" provided the information base of individuals and entities engaged in entrepreneurial activities, registration authorities, regulatory bodies, credit institutions, besides the introduction of a single electronic reporting for business entities, as well as accelerating the implementation of other simi-

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lar information and communication projects .

4. *Fourth*, we will create the necessary conditions and opportunities for the priority development of private property. This will be embroidered with the scope of the participation of businesses in the commodity markets. In particular, will be increased sales of highly liquid products companies on the open exchange trading, as well as corporate and expand the system of state purchases through open electronic trade.

In 2015 - 2019 years. the volume of loans provided by commercial banks to small and private businesses, including long-term loans granted for the purpose of investment will be increased by 2.5 times. Individual entrepreneurs without a legal entity will be provided with the right recruitment of one to three employees, depending on the type of activity. At the same time, tax benefits paid by an individual entrepreneur, also apply to the employee. If individual entrepreneurs hires college graduate, entrepreneur exempts from taxes imposed on wage earners. However, it was found that the annual costs of business entities with state shares in its authorized capital of more than 50 percent and state-owned enterprises to charities and other grant assistance shall not exceed 10 percent of net profit for the previous year, as well as establishes the procedure for the disclosure of this information in the media and on the official websites of organizations. In addition, surveys are conducted on a representative sample of businesses in each region to assess the condition of the business environment in the Republic of Uzbekistan, and their results are included in the Ministry of Economics.

The implementation in practice of the above mentioned legal and institutional norms is an important step towards the priority development of private property, small businesses and private entrepreneurship in our country. Their novelties are in the following:

- For the support and protection of private property and private entrepreneurship reinforced the responsibility of officials of state authorities.

- More liberalized legislation to protect businesses and private property rights.

- Simplified state registration entrepreneurs activities, provide the permits and licenses, including the rules of foreign trade activities.

- Established specific measures to create the necessary conditions and opportunities for further improvement of the priority development of private property and private enterprise and business environment.

Thus, the introduction by the Government of the Republic of new institutional rules to regulate private property and small business is the foundation for further improvement of the business environment, and the providing for their protection, property registration, the organization of private enterprises, obtaining building permits, connection to the electricity, water and other sources and other provisions, no doubt, raise the business environment, in terms of liberalization to a higher level and it will provide the basis for the expansion of the country's class of owners who have their own income property.

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INTERPRETATIONS OF BASIC CONCEPTS OF ANTIMONOPOLY LEGISLATION

Anvar S. Usmanov
Doctor of Economics, professor, Tashkent Branch of Russian Economic University after G.V. Plekhanov, Republic of Uzbekistan

Abstract

In this article new interpretations of basic concepts of antimonopoly legislation are given according to adopted Law "On competition" in Uzbekistan in 2012.

Keywords : interchangeable goods, unfair competition, economic concentration, economic activities coordination, discrimination conditions

Law “On competition” operates in Uzbekistan to regulate relations in the field of competition at present. Presence or absence of arguable questions in law enforcement practice depends on accuracy of formulations of concepts used in key statutory act of legislation about competition which are finally brought to judicial proceedings, and also in possibility of unfair participants of market to avoid responsibility because of imperfection of legislative norms. Article 4 of current law has legislative definitions of terms used in the field of competition.

It is necessary to note that with adopting Law “On competition” in 2012 conceptual device of legislation on competition is improved. Such concepts, as “goods”, “commodity market”, “interchangeable goods”, “managing subject”, “competition”, “unfair competition” are specified.

There introduced new concepts - “financial market”, “economic activities coordination”, “anticompetitive actions” instead of “monopolistically activity” concept. Separate concepts included earlier in article 3 of Law of the Republic of Uzbekistan in 1996 “On competition and restriction of monopolistically activity in commodity markets”, there are allocated independent articles - “group of people” (article 5), “leading position” (article 6), “exclusively high price of goods” (article 7), “exclusively low price of goods” (article 8).

Thus such concepts as “absolute monopoly” and “price discrimination” are excluded in current law. Let us give examples of basic concepts applied in current law in which essential adjustments are included.

“Interchangeable goods are goods which can be compared according to functional purpose, application, qualitative and technical characteristics, price and other parameters in such way that a purchaser really replaces or is ready to replace one goods with another in consumption”. Addition is included in this concept because the purchaser of goods can only make last and unique correct decision on interchangeability therefore definition of this concept is expanded and added to concrete definition of this fact. A number of several signs are necessary for recognition of interchangeable goods.

“Unfair competition is actions of managing subject or groups of people directed on acquisition of advantages at realization of economic activities which contradict legislation, customs of business circulation and cause or can cause losses to other managing subjects (competitors) or damage or can cause damage their business reputation”. This edition differentiates clearly a concept of “unfair competition” from those actions which are covered by articles “Abusing leading position” (article 10) and “Prohibition of coordinated actions and transactions of managing subjects limiting competition” (article 11). Actions concerning unfair competition are defined by current law in article 13. They are :

- incorrect comparisons, capable to cause losses to other managing subject or damage its business reputation;
- sale of goods with illegal use of results of intellectual activity and means of entity individualization equal to them, means of product individualization;
- misleading consumers about character, way and point of production, consumer properties of goods, price, product quality, guarantee certificates of manufacturer (executor), imitation of goods made by managing subject (competitor) by reproduction of external registration of goods, its name, marks, trade mark and other means of entity individualization, copying ad-

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vertising materials, firm packaging and products form;

- reception, use, disclosure of scientific and technical, industrial or trading information, including trade secret without its owner consent; and
- blocking the access of other managing subject in commodity or financial market.

"Economic concentration" is fulfillment of transactions and (or) other actions leading to prevalence of managing subject or group of people which influences on competition condition in commodity or financial market. Economic concentration is a degree of prevalence of a person or group of people, received as a result of fulfillment of transactions and/or other actions. With a view of banning economic concentration in current law there is special Chapter 3 "Antimonopoly regulation of auctions and economic concentration" in which it is provided: "Antimonopoly body gives preliminary consent on: creation of associations of managing subjects; merge and takeover of managing subjects" (article 16).

Besides, "Transactions on acquisition of stocks (shares) in authorized capital ... are made with preliminary consent of antimonopoly body ..." (article 17).

Thus, in article 11 "Prohibition of coordinated actions and transactions of managing subjects limiting competition" there given detailed disclosing possible negative consequences of economic concentration treated as restriction of competition.

"Economic activities coordination is coordination of actions of managing subjects with entities and individuals who is not entering into one group of people with one of such managing subjects". New concept is introduced in current law with a view of classification of separate kinds of activity of managing subjects which, being in certain hierarchical mutual relations, coordinates activity and limits competition by its way. In foreign practice there are cases when two (independent) managing subjects (for example, "Consumer union" and "Trading house") enter into agreement in which there established that products receiver - ("Trading house") should give trading discount in a size determined by this agreement to each cooperative enterprise. Abovementioned actions cannot be included in abusing leading position, a group of people and coordinated actions as subject represents interests of subhierarchically connected subjects not having essential market share in market, without owning stocks (shares etc.) also without being competitor to subjects which it represents. In this case there forbidden just coordination of economic activities of managing subjects if such coordination can lead to establishment or maintenance of prices (tariffs), discounts, extra charges (surcharges), margins.

Besides above-stated coordination of economic activity can engage other people possessing market power they are state bodies and public authorities on places - certificates and actions of which can limit competition. Article 12 of current law is devoted to prohibition of similar situations.

"Discrimination conditions are conditions of access in commodity or financial market, conditions of production, consumption, acquisition, realization, other transfer of goods which in other equal conditions put one or several managing subjects in unequal position in comparison with other managing subject (competitor)". In previously operating law edition a term had limited definition which specifies unique case and not appropriate absolutely. Imposing conditions to counterpart which are not concerning subject of contract can and cannot be discriminating condition. Besides, it is not clear to who are shown discriminating conditions: managing subject or any other. Further, in article 5 of previously operating edition, imposing the conditions to counterpart are not concerning contract subject and discriminating conditions were referred to different kinds of infringements that led to different and wrong interpretation of Law. Additional requirements to auctions are included in connection with provision of separate article on competition maintenance at carrying out competitive (tender) auctions (article 14) in current law.

"Coordinated actions are actions of two or more managing subjects in commodity or financial market, satisfying the interests of each of specified participants of the market and known to each of them in advance which lead or can lead to competition restriction". Coordinated actions are considered as behavior of managing subject whom he put consciously in dependence on behavior of other participants of the market. Coordinated actions unlike the agreement do not assume presence of oral or written arrangement between managing subjects about fulfillment of certain actions. Coordination of actions can be reached by repetition of actions of one managing subject simultaneously or after other managing subject.

"Financial market is a sphere of circulation of financial service rendered by banks and other credit, insurance and other financial organizations, and also services of professional participants of securities market on the territory of the Republic of Uzbekistan or its part which can not coincide with administrative and territorial division of the Republic of Uzbekistan and in which borders there is a possibility of its rendering". This definition is developed according to current legislation about securities, insurance activity and international practice as well. This concept is introduced in connection with distribution of action of Law "On competition" (unlike previous laws) in the market of financial services. In this connection a great significance has

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disclosing such concepts, as financial service, borders of financial market, market share in financial market, leading position in the market of financial services, exclusively high and exclusively low prices for financial services. In current law in this concepts there given reference to Cabinet of Minister. In this connection it is appropriate to give Decree of the Cabinet of Ministers of the Republic of Uzbekistan No 230 from 20.08.13 "On measures on perfecting antimonopoly regulation in commodity and financial markets" where there confirmed: "Regulation about order of recognition of leading position of managing subject or group of people in commodity or financial market and conducting State register of managing subjects occupying leading position in commodity or financial market" (appendix 1); "Regulation about order of definition of exclusively high and exclusively low prices of services in financial market" (appendix 2). All above mentioned concepts are revealed in these regulations.

"Incorrect comparison is false, inexact or deformed comparison creating in commodity or financial market which is advantage to separate managing subject or discrediting managing subject (competitor) or goods, made by competitor, and proceeding from competitors or other people". Incorrect comparison can not only cause a loss to any managing subject, but also create certain market advantages to distributor of these comparisons. For example, unreasonable statements about advantage of certain goods do not directly discredit competitors or their goods, however create unreasonably positive image for distributor that can negatively affect competition. Besides, frequently incorrect comparisons which proceed from the third parties are published in mass media. These incorrect comparisons can discredit competitors or create market advantages to certain market subjects. In such cases, third parties remain without punishment.

"Competition is competitiveness of managing subjects (competitors) at which their independent actions exclude or limit possibility of each of them influence unilaterally on general conditions of product circulation in commodity or financial market". This concept is concretized according to practice and foreign experience. Actions which exclude competitiveness between them and give chance to managing subjects, carrying out such actions influence on general conditions of product circulation in corresponding market, are referred to the actions which it is possible to explain as action on restriction of competition that are covered by concept "anticompetitive activity". Concept definition is developed with the help of the work (source) of leading economists (Economics - Makkonel, Bryu) and specified according to international practice and experience of EU countries is taken as an analogue.

"Anticompetitive actions are actions of managing subjects prohibited by legislation about competition, and also actions (inactivity) of state bodies, public authorities on places and their officials, directed on competition restriction". This concept is introduced instead of "monopolistically activity" concept. The law can be actually broken by managing subjects and their associations, and individuals, bodies of state and economic board and public authorities on places. Introduced term covers all actions which are directed on restriction of competition and have been not considered earlier in the concept of "monopolistically activity".

"Commodity is a product of activity intended for acquisition and realization, including work and service". New concept expands sphere of coverage of concept "commodity", including work and service, and also considers every possible introduction of goods in turnover. New concept is developed with the help of the work (source) of leading economists (Economics - Makkonel, Brue) and specified according to international practice and experience of South Korea, Japan and EU is taken as analogue. Thus it is necessary to take into account that according to Civil Code of the Republic of Uzbekistan not all goods are products of certain activity. Relations between managing subjects, arising in turnover of objects of civil rights intended for sale, exchange or other introduction in circulation, including such objects of civil rights which are not activity products.

"Commodity market is a sphere of products circulation (including interchangeable) on the territory of the Republic of Uzbekistan or its part which can not coincide with administrative and territorial division of the Republic of Uzbekistan and in borders of which there is a possibility of its acquisition or realization". The concept "market" used in commented Law, differs from daily concept of market that with a view of competition concept "market" demands definition of two necessary parameters: first is a definition of considered goods which do not have substitutes, or groups of interchangeable goods; the second one is product circulation territory which borders are defined proceeding from technical or other possibility or expediency of acquisition of this goods in this territory.

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Solutions to The Problems and Interests of Subjects of Social Partnership in Uzbekistan

Bakhodir Kh. Umurzakov
Doctor of Economics, professor
Tashkent Branch of Russian Economic
University after G. V. Plekhanov
Republic of Uzbekistan

Abstract

Deepening market economy and economic relations of various segments of population determines compromise between them, taking into account interests conflict. This complex process in a society is impossible without formation of social partnership institution. In 2014 there adopted Law Ön social partnership" in Uzbekistan. Its implementation requires depth analysis on the basis of international experience. The article analyzes some aspects of its formation and development in the conditions of deepening market relations in a society.

Keywords :social partnership; deepening market relations; social and labor sphere; collective agreement; territorial bodies.

Fundamental structural and institutional changes in the sphere of social and labor relations in Uzbekistan, future prospects of this process set atask to justify social partnership as a social phenomenon, explain its development prospects and analyze forms of regulation at scientific community.

Social partnership is a category of mature market economy which is characterized by institutionalization of social partners. Formal beginning of adoption of social partnership at global level can be considered as a creation of International Labor Organization which carries out its activity on tripartism principles. In Uzbekistan such starting point was a report of I. Karimov "Concept of further deepening democratic reforms and formation of civil society in the country" and law of the Republic of Uzbekistan "On social partnership".

In early 90-ies in Uzbekistan there established Coordinating Council of employersat Chamber of Commerce of the countrywhich express their position and pay particular significance to coordinate employers'actions in regulating social and labor relations. There formed a network of territorial associations along with merger, effective at the state level. An important stage in information and legal formation of employers ' unions of Uzbekistan as a full participant of negotiation process was adoption of law "On public associations" and "On non-governmental and non-profit organizations", which allowed to accelerate consolidation of business community. Creation of regional associations of employers accelerated the development of social dialogue at all levels.

Practice showed that today there is no one single model of social partnership suitable for all countries in the world. The existing model can be generally classified as follows: "American" - based on broad participation of workers in ownership of enterprise; "German" - based on involvement of workers in production management through specially created bodies, tariff autonomy; "Scandinavian" – which means staff involvement in distribution of production results.

Uzbek model of social partnership is based on:

- general legislation and general principles of social partnership inherent this phenomenon, regardless of its belonging to this or another country;
- international legal regulation of social and labor relations;
- rational use of world experience of formation and development of social partnership in Russian practice with obligatory account of Russian specifics; and
- recording new factors and events that are used in practice of social partnership of national

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mentality, and existing experiences and current realities of national economy.

Essential content of Uzbek model of social partnership can be expressed in the following terms.

1. First, they are specifics of position, role and form of activities of each of subjects of social partnership system. For example, content, nature and boundaries of state involvement in regulation of social and labor and other relations. This participation is characterized by traditionally high role of the state as a main subject in formation of social policy, as exponent, representative and advocate for the interests of society as a whole. In Uzbek model of building socially oriented market economy based on five principles of transition to market the state as a main reformer of economy and society is also a main guarantor of stable development of social relations. Low social responsibility of employers should be taken into account. This can be considered as some kind of feature of initial stage of transition to the principles of social partnership among subjects. It should be noted that trade unions of Uzbekistan having relatively high abundance, more fully than in other countries represent rights and interests of employees. However, it should be noted their low passivity up to the end of dependence of trade unions from employer, especially at enterprise level.

2. Secondly, specificity of Uzbek experience is in expansive interpretation firstly spheres of social relations governed on principles of social partnership: it is not only social and labor but connected with it economic and political relations.

3. Thirdly, there is one of the easiest systems of social partnership in Uzbekistan it is distinguished by three-tier character and significant efficiency.

4. Finally, fourth, development of legislative framework of a system of social partnership in Uzbekistan is expressed in fully ratified conventions on labor according to therequirements of ILO.

At present, there created legislative bases regulating interaction of main subjects of economy through a system of social partnership. Legislation is defined by a concept of social partnership as a system of relations between workers, employers and public authorities, local self-government. There continuously operated State Labor Inspectorate under Ministry of Labor and Social Protection, which involves harmonization of social and economic interests of parties, where General agreement between trade unions, employers and Government of the Republic of Uzbekistan is prepared each year. As it is known, it is fundamental document that is established in accordance with the Code of Labor Laws, General principles of regulating social and labor relations at state and local level. Agreement, which is a part of collective bargaining process in a system of social partnership and serves as a basis for development and conclusion of sectorial agreements at national level and territorial agreements isa result of hard work on harmonization of basic principles of formation and implementation of social and economic policy of the country, provision of balance social and economic interests of workers, employers and state.

Agreement parties annually negotiate about necessity of development and realization of programs of social development groups, sectors and territorial and administrative divisions aimed at increasing real wages, reducing poverty, strengthening guarantees of social protection of working citizens, reducing tensions in labor market and regulation of labor migration, prevention of negative consequences of restructuring economic sectors, improving quality and conditions of employees'working life, protection of labor rights and labor protection.

In the nearest future there is amplification of a number of directions in development of social partnership in the sphere of management of social and economic processes: - enhancing relevance of principles of social partnership at the state level; - further development of horizontal forms of interaction (social partnership between NGO and public authorities with involvement of business structures aimed at qualitative changes in the conditions of workers' life); and - clarifying and strengthening social responsibility of parties for implementation of collective treaty obligations of the company and specific area.

Improving social partnership system is extremely important in increasing efficiency of state social policy. It is possible to judge coherence of partners, level of labor organization and maturity of social and labor relationsaccording to actively engaging in social dialogue. It is so kind important step from strong state to strong civil society – through mechanism of social dialogue.

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Collaborative Video Production, an effort to learn Indonesia culture for Uzbekistan Students

Evan Winanda Dirga
Universitas Gunadarma
evnas@staff.gunadarma.ac.id

Arum
Universitas Gunadarma
arum@staff.gunadarma.ac.id

Nuke Farida
Universitas Gunadarma
nuke_farida@staff.gunadarma.ac.id

Kiayanti Yusriyah
Universitas Gunadarma
kiayati@staff.gunadarma.ac.id

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Dangerous Driving Behavior Based on Affective Personality Among Students of Gunadarma University : Preliminary Study

Matrissya Hermita
Student in Doctoral Program in Psychology Gunadarma University
Jakarta Indonesia
matrissya@staff.gunadarma.ac.id

Abstract

The study aimed to examine the differences in dangerous driving behavior according to the affective personality. A total of 50 subjects, students in Gunadarma University consisting bachelor to doctoral students, were involved in the study. The subjects comprised of 26 males and 24 females, with ages between 17-32 years. The measures include the Dula Dangerous Driving Index and Positive and Negative Affect Personality Scale. Based on the 'subjects' scores from the positive and negative dimensions, the subjects were classified into four groups of affect personality types namely: Self Fulfilling Personality (high positive affect and low negative affect), High Affective Personality (high positive affect and high negative affect), Low Affective Personality (low positive affect and low negative affect), and Self Destructive Personality (low positive affect and high negative affect). One-way ANOVA was performed to test the study hypothesis, that there would be a significant differences in dangerous driving behavior based on the four personality groups. The results of the analysis showed no significant differences that confirm the hypothesis ($p>0.05$). The self-fulfilling group displayed the lowest Dangerous Driving Behavior, while the self-destructive group displayed the highest. The high affective and low affective were intermediary between those two groups.

Keywords : Dangerous Driving Behavior; Affective personality

1 Introduction

Global Status Reports on Road Safety 2013 revealed that approximately 1.25 million people dies each year on world's roads as a victims of road traffic injury, while nearly 20-50 millions people sustain from non fatal injury. Moreover those reports also demonstrated that in 2010 Indonesia had an account for 31.234 death cases caused by traffic injury and decreased to 25.157 death cases in 2013. Although it was a decreased, still there is an urgency to examine these trends and considerably claimed to be an essential issues wherefore the traffic injury, in theories are preventable.

WHO defined road traffic injuries as a fatal or non-fatal injury incurred as a result of collision on a public road involving at least one moving vehicles. The collision, according to the previous study is typically as the results of several contributing factors. Emphasizing to human factor, (Lewin, 1982; Rumar, 1985 in Shinar, 2007) estimated that the human factor is responsible for 85-90% of road accidents. Therefore, many researches has been conducted and focused on driving behavior but there are still inconsistency in terming the behavior it self.

Aggressive driving behavior is one of the terms that proposed by Martinez (1997). Deriving from aggression term, aggressive driving was defined as a driving behavior that endangers or is likely to endanger people or property, ranging from risky driving to violence. Thus, Helmon, Grayson, & Parkes (2010 in Roelofs et al, 2012) confirmed that speed choice, close following front vehicle, high risk overtaking, violation of traffic laws, as well as engaging distracting activities such as speaking on mobile phone while driving, listening to the music, taking with passanger. In to extent, all behavior that lead to collision is being considered as dangerous driving behavior.

Furthermore, three aspects of driving behavior have been considered as aggressive in driving literature and corroborated Dula and Geller (2003) in study of dangerous driving behavior. Hence, Dulla and Geller (2003) once proposed the term dangerous driving be used to describe the three major classes of potentially harmful driving behavior, which reffered to the aspects as follow :

(a) Aggresive driving as an intentional acts or be-

havior, including physical, verbal, or gestured aggression with an intention to cause physical and/or psychological harm

(b) Negative cognitions and emotions (anger, frustration) experienced while driving

(c) Risky driving as risk-taking behavior refers to unintentional acts that slightly endanger (speeding, running red lights, frequent lane changes, lapses of attention, driving while intoxicated) while driving.

Therefore, dangerous driving behavior accommodates several or various driving behavior as well as states of mind that can lead to an accident.

Regarding to driving behavior, several recent studies have investigated the role of personality and traits in human error while driving. Some studies that show relationship between personality, traits sensation seeking, impulsivity and another personality traits. More frequency perform excessive speeding, frequent overtaking, reckless lane-changing and driving under influence of alcohol and drug (Arnett et al., 1997) was found in higher sensation seeker.

Another important human factor in driving is the emotional as well as affective states of the driver (Oehl & Hoger, 2014), with many researches suggested that general affective state was considered as a main cause for maladjusted driving that will lead to traffic collision. Those researches however emphasize the effect of negative affect such as anger in driving performance, and it is empirically proved will increase risky driving behavior. In the other hand, only few studies have investigated the positive affect states in driving behavior. Nevertheless a study conducted by Oehl and Hoger (2014), found that young and novices driver drove significantly faster in positive affect state compare to the negative affect states. These inconsistent findings present a need to gain further empiric evidence related to affect, however with a different approach.

Affect describes as a several relevant constructs that are distinct but frequently treated as interchangeable, including emotions feelings and moods. Furthermore Affective state defined as the expression of the concatenation of feelings and emotions stemming from the outcome of individual's appraisal, evaluation and decisions of the situations and events that the individuals are confronted for. Watson, Clark, and Tellegen (1988 in Ancok, Ramdhani, Adrianson, 2014), was proposed this concept of which was derived to the PANAS (*Positive Affect Negative Affect Scale*) which they developed and has been vastly used in several psychological contexts.

In PANAS, positive affect reflecting active, alert, attentive, determined, enthusiastic, proud and strong that dispose individual in maintaining a positive outlook over both time and in various situation (Ancok, Ramdhani, Adrianson, 2014). Contradictory, negative affect have tendencies shown to be maintained as relatively stable characteristics expressing negative feelings such as afraid, scared, nervous, jittery, irritable, hostile, guilty, ashamed, upset and distressed as well as a tendencies to experience regularly over time in different situation that might last over a years.

Furthermore, Norlander, Bood and Archer (2002) later developed a method allowing the establishment of four personality types emerging from the PANAS scales. These authors elaborated thet combining the score of positive affect and negative affect may increase explanatory power, and therefore propose four personality types; self fulfilling, high affective low affective, and self destructive. Numerous studies have indicated that different affective personalities also differ in the level in perceived and experienced stress (Adrianson, Ancok, Ramdhani & Archer, 2013) coping towards stress (Arnten, 2008 in Ancok, Ramdhani, Adrianson, 2014), personality characteristics (Bood, 2004, Karlsson, 2007 in Ancok, Ramdhani, Adrianson, 2014), anxiety levels (Archer, 2007; Norlander, 2005 in Ancok, Ramdhani, Adrianson, 2014) The advantages of using the four personality types is superior compared to the two dimensional model because affective personality has also found to be associated with personality characteristics (Bood, 2004; Karlsson & Archer, 2007 in Ancok, Ramdhani, Adrianson, 2014) that also related to dangerous driving behavior.

By extrapolating those recent finding, it is hypothesized that there is a differences in dangerous driving behavior according to the affective personality type. Self-fulfilling group will display the lowest level of dangerous driving behavior, while the self-destructive will display the highest. High affective and low affective groups will be intermediary between those two groups.

2 Methods

2.1 Participants

Data was collected from bachelor to doctoral students of Gunadarma University. A purposive sampling technique was applied by taking subjects that have the ability in driving car. A total of 50 subjects were involved in the study, consisting of 26 male and 24 female students, age ranging from 17 to 32 years.

2.2 Measurements/Instruments

Total 50 fulfilled questionnaires that consists of demographic part, Dula Dangerous Driving Index and PANAS scales were indicated valid responses and subsequently included for further analyses.

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The Dula Dangerous Driving Index (DDDI) was used in this study to assess dangerous driving behavior as dependent variables. The scale was honed to 28 items were split into three conceptually distinct aspects: Risky Driving (12 items), Negative Cognitive Emotion Driving (9 items) and, Aggressive Driving (7 items). Dangerous Driving Behavior with the alternative responses following the 5 point Likert scale model ranging from never =1 to always=5. Reliability analysis revealed that only 21 items were valid, and 7 items were dropped. Results of the reliability analysis indicate that the DDDI scale has good validity with Cronbach alpha = 0.878.

In the other hand, The Positive Affective – Negative affective Scale (*PANAS*), that was used to assess affective personality as independent variables, developed by Watson, Clark and Tellegen (1988). A 20 items is divided into two sub-scales that represent two dimensions, Positive Affect (PA) that consists of 10 items and Negative Affect (NA) that also consist of 10 items. Responses for this scale based on a 5 point Likert scale from 1 = strongly disagree, 2= disagree, 3= slightly disagree, 4=agree, 5= strongly agree. The Alpha Cronbach value to test the reliability for the positive affect is 0.885 with no dropped item, while for the negative affect is as much as 0.834 with 1 dropped item.

Furthermore, the empirical mean was used to classify the four types of affective personality. All the steps were starting from calculating the total scores and empirical mean for both positive and negative affect dimension. Afterward is comparing empirical mean with individual mean as well as giving a code and combining the results to classify the affective personality types. A code of 1 is given for scores equal and above the empirical mean that resembles high affect, while a code of 2 is given for scores below the empirical mean that resembles low affect. Following these, the coding results from both positive and negative affect were combined and classified into four types of affective personality and assigned each participant into four group regarding to own types, by these following rules: individuals showing high PA and low NA ("Self-fulfilling"), High PA and High NA ("High affective"), low PA and low NA ("Low Affective"), low PA and High NA ("Self destructive")

3 Results and Discussion

A one-way anova was used to examine the influences of affective personality in dangerous driving behavior before comparing dangerous driving behavior between affective personality's groups. Homogeneity tests found no differences between groups (Levene statistics=0, 977 p=0,412). The results of the analysis showed that there is no significant different in dangerous driving behavior according the type of affective personality in to extent they're also no significant influences from affective personality towards dangerous driving behavior.

Table 1: Results of One Way Anova tests

	Sum of Squares	Db	Mean Square	F	Sig.
Between groups	282,063	3	94,021	,650	,587
Within Groups	6652,437	46	144,618		
Total	6934,500	49			

Nevertheless, the descriptive statistics of dangerous driving behavior showed that the self-fulfilling group displayed the lowest dangerous driving behavior score (M=42,17), countering the self-destructive group that displayed the highest score (M=50,17). Thus, in between those groups, both high affective (M=46,82) and low affective (M=45,19) lied intermediary.

Table 2: Mean Affective Personality Types and Dangerous Driving Behavior

Variable	Affective Personality				Total
	S-F	H-A	L-A	S-D	
Mean Dangerous Driving Behavior	42,17	48,82	45,19	50,17	45,30
N	17	11	16	6	50

Consecutively, to test for differences between groups, post hoc analysis was performed towards the data, thus the results of the analyses will indicate no significant difference between mean of dangerous driving behavior for the entire existing group. Therefore a descriptive was performed toward the dangerous driving behavior aspect between the groups.

Table 3: Mean Dangerous Driving Behavior Based for each Affective Personality

Aspect of Dangerous Driving	Affective Personality			
	S-F	H-A	L-A	S-D
Negative Cognition Emotion	13.94	15.91	15.44	16,67
Aggressive Driving	10,47	12,09	11.19	14,67
Risky Driving	18,29	18.82	18.56	18.83

The current study demonstrated that there is no significant influence of affective personality in dangerous driving behavior; hence there are also no differences in dangerous driving behavior between the affective personality groups. In accordance from descriptive statistic, the self-fulfilling group having the lowest dangerous driving behavior while self-destructive possessed the highest dangerous driving behavior. The self-fulfilling type itself is resembled by high positive affectivity (PA) and low negative affectivity (NA) contrasting the self-destructive that resembled by low PA and high NA (Norlander, Bood & Archer, 2002).

In this study, a dynamic complicated driving task represents the situation where emotions and affect can lead to several consequences moderated by driving behavior. Moreover these also involve individual appraisal in to current driving situation, subjectively. Individual possessed high NA had tendency to regularly experience and complain several negative feeling (Costa & McCrae, 1980 in Norlander, Bood & Archer, 2002). Hence in real driving situation, a complex driving task will be perceived as anger provoked situation. Deffenbacher et.al (2001) claimed that angry driver however could become aggressive and tend to incorporate a higher level of risk taking into their driving styles as well as determining exceed speed choices. Thus angry driver has been found to be twice or likely to be involved in traffic accidents (Deffenbacher et.al., 2003). In a line, high NA also prone to higher level of anxiety, while on the other hand some researches also suggest that anxiety were positively correlated with dangerous driving behavior. In accordance, justifying current results study, those groups with high NA (self destructive and high affective group) displayed higher dangerous driving behavior compare to group with low NA.

Both PA and NA influence the manner and extent to which individuals view, experience and approach stressful events over both time and circumstance. While high NA had been discussed above, high PA is associated with sociability, control, helpful behavior, feelings of duty, accuracy, care in decision-making and positive attitude over time and circumstance. Thus, high PA became perquisite trait to cope with stress, in this context related to driving situation.

There are surely some limitations of the current study. Amongst is the number of the subject participate in this study, hence unequal distribution of affective personality types is applied. Moreover it could be suggested in future studies to count and examine another factor that related to dangerous driving behavior such as cognitive load, impulsivity and self regulated behavior. It is also possible to asses some physiological factor related dangerous driving behavior.

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Some Issues of State Regulation of Innovative Processes in Uzbekistan

Kurpayanidi Konstantin Ivanovich,
PhD in Economics, Professor of the
Russian Academy of Natural Sciences
Fergana Polytechnic Institute,
Uzbekistan
w7777@mail.ru

Forming an effective national innovation system in the Republic of Uzbekistan is an important element of the state innovation development strategy, with which you can convert a complex production sector, to upgrade production apparatus, etc. Only active innovation policy can lead the country to new frontiers and open up prospects for the formation of the modern economy.

Compared with developed countries, the national economy of Uzbekistan in 2012, continued to grow quite rapidly: GDP growth - 8.2%[a,], and that is very important, mainly due to domestic demand.

The results of monitoring of socio-economic development of the country over the past five years show that the Government of the Republic of Uzbekistan should concentrate its efforts on promoting research and innovation, as well as the transition to a modern economy based on knowledge. The country spends on new technologies and innovations less than other leading states.

In the global innovation index (The Global Innovation Index), according to the international business school INSEAD, Uzbekistan took in 2013 139 th place. Top Rated: Switzerland (figure 66.6) and Sweden (61.4), among the CIS countries - 59 th place Armenia (37.6), 62 th - Russia (37.2), 71st - Ukraine (35.8).

The Agency for Intellectual Property in Uzbekistan in 2012. 6572 filed an application for registration of intellectual property objects registered in 2188[201, 2014b]. In recent years, Uzbekistan has increased the volume of investments in R & D. So, if in 2007 it amounted to 61231,2 million UZS., in 2012 – 197914,1 million UZS.

Gross domestic expenditure on development and innovation in Uzbekistan make up less than 1% of GDP and 2/3 are financed by the state budget. In 2012, research and development is mainly carried out by research organizations (118 003,9 million UZS) and higher education institutions (24742,5 million UZS). Nevertheless, there is a trend of rising costs of industrial enterprises (10480,8 UZS). On undertaken on an ongoing basis Republican fair of innovative ideas, technologies and projects for the period 2007-2012. There were more than two thousand. of innovation, signed more than 1500 contracts worth 44.7 billion UZS result was the development of production at domestic enterprises tens of kinds of new products, a total of 480 billion UZS.

Only in 2015 the fair participated 112 subjects, including 21 structural division of the Academy of Sciences of Uzbekistan, 23 units of the Ministry of Higher and Secondary Special Education, Ministry of Health of 20 institutions, the same - the Ministry of Agriculture and Water Management, 28 other organizations.

Despite the considerable resources allocated by the state, the question of the adequacy of funding for research and development does not lose its relevance. A survey conducted among representatives of the business sector who participated in the VI Republican fair of innovative ideas and projects in 2013, showed that a significant economic factor hindering innovation in the Republic of Uzbekistan, is insufficient own financial resources and state support[201, 2013].

Among the features of the innovation process in the national economy of Uzbekistan is not only the predominance of government R & D funding sources, and a sharp contrast between the advanced high-tech enterprises and enterprises with very low productivity and weak desire to innovate.

In addition, features are focus of innovation policy /"top-down/" and fragmentation of innovative structures. One of regulating and stimulating innovation measures - providing economic entities privileges and preferences on taxes and mandatory payments. So, according to Art. 145 n. 36 of the Tax Code of the Republic of Uzbekistan[201, 2014a], to other expenses for income tax of legal entities include R & D expenses related to the activities (ex-

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cept those that are aimed at the acquisition of fixed assets, their installation and other expenses of a capital nature).

In accordance with Art. 208 p. 9 of the Tax Code shall be exempt from value added tax on the turnover of the implementation of research and innovation work carried out by the budget. The basis for this benefit is the conclusion of the financial authority to allocate funds from the budget. In 2008-2013, enterprises engaged in R & D have been exempted from payment of income tax, single tax payment, VAT and mandatory payments to the state funds (except single social payment) as part of R & D[200, 2008].

In 2014, business entities, except for micro and small enterprises, used in its production activities completely worn-out equipment, computed as the primary means for the balance of the organization are payers of worn-out equipment (amounting to 0.25% of the original replacement cost).

It should be noted that the country has all the elements of the innovation system necessary for its successful functioning, but they are poorly connected to each other or not at all related. Not built /"triple helix/" - the effective interaction of the state, science and business. One of the important issues - the establishment of effective mechanisms for the competitive allocation of public funding.

The objects of state regulation and support should be, above all, fundamental and applied science; innovative entrepreneurial projects aimed at the commercialization of inventions; corporate initiatives on research development and use of their results in the production process; new forms of business innovation (venture capital funds, business incubators, university innovation and technology centers).

The experience of countries with developed market systems indicates that the process of increasing public participation in the innovative development of the national economy of Uzbekistan should be carried out in stages and with the help of economic levers. Here at the forefront should extend the problem of increasing the efficiency of the public sector as a whole, as well as the efficiency of each project, with government participation throughout society. One form of so-called indirect privatization of a large business is the creation of public-private partnerships. The potential of the public sector should be used primarily in those areas and fields of activity where it is justified, such as in high-tech industries.

In terms of the promotion of innovation in small and private business prime step should be an awakening of interest in this sector of the economy to innovate based on a spiral /"development and innovation - reduction of production costs - increasing profits/". The second step should be the equal participation of the state in the financing of innovation and the maximum facilitation of access of small and private businesses to public finance.

It is advisable here to use tools such as long-term leasing of equipment and state orders. To facilitate the involvement of external financing by listing on the stock exchange may use the tools of tax policy. It is necessary to develop a methodology to assess the effectiveness of existing programs, R & D funding and to compare the cost to performance research.

When an objective necessity of state regulation of innovative processes at the present stage of development of the Uzbek economy of innovation strategy is possible only by joint efforts of the state and private capital, the potential of which is at least as the public sector.

To this end, the following actions:

activation of the formation of industrial parks, industrial sites, Technopolis;

creation of innovation clusters and centers of technology transfer between the academic, departmental science and industry;

In order to address financing of breakthrough innovation projects-the creation of the Institute selection of innovative projects based on public-private partnership[Rasulev A.F., 2011];

improvement of legislation, development and adoption of laws /"On innovation activity/", /"On Science/";

amendments to the Tax Code, the legislation regulating investment activity, as well as the monitoring and revision of the legislation on intellectual property protection in the innovation sphere.

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Meaning of Happiness for Indonesian Mothers

Nurul Qomariyah
Faculty of Psychology, Universitas
Gunadarma

Abstract

The purpose of this study was to explore the meaning of happiness for Indonesian mothers. The study was a survey on the total number of 147 mothers. The data was analyzed by indigenous psychological approach of analyzing the content of open ended responses, categorization of the responses, and cross tabulating. Results of the study show that the meaning of happiness could be categorized into four category, which are : 1) the achievement of desire or goal (50.3%) (2) become part of the family (27.9%) (3) positive feelings because close with God (16.3%) (4) good marriage relationship (5.4%). Most of meaning, related to family or group. This is suggest, that the four meaning of happiness for Indonesian mother in this research, in accordance with Indonesian culture, that have collectivism characteristic.

Keywords : meaning of hapiness, motherhood

1 Introduction

Mother is a noble figure. The honor of mother accompanied by the great duties and responsibilities that must be done by the mother. Duties and responsibilities of the mother were associated with the stereotype. In Indonesia, women were viewed to be not strong, not brave, have a shy nature, not angry, not demanding, impatient, submissive, soft hearted, dependent, passive, more controlled emotion, supporting careers husband, serves as a mother with the task of educating children, and should not be greater than the husband in terms of skill and income [Darmojuwono, 2000]. Such perspective, directing women on two things. The first is that men have more rights than women, especially in terms of education and employment. Secondly, that the principal duty or obligation of a mother is taking care of and educating children and supporting her husband. Related to rights inequality between men and women in education and employment, it is not in accordance with the law in Indonesia. Article 48 of Act 39 of 1999 about the human rights states that women have the right to education and teaching in all types, levels, and educational pathways in accordance with the requirements specified. As for article 49, paragraph 1 of the Act states that the woman's right to choose, chosen, appointed in employment, occupation and profession in accordance with the requirements and regulations. Under both articles, the women have the same rights as men in terms of education and employment. The position of women and men in education and employment in the eyes of the law had been equal, but in reality it is not easy for a mother to be able to pursue higher education and work outside the home. This relates to the duties and obligations of a mother, that is taking care of and educating children. Taking care of and educating children is not an easy job. The mother must have a healthy mental so their children can grow in a healthy manner too. Based on Keyes, [Keyes, 2002a] terms of individual's mental health indicates two factors, which are subjective well being (SWB) and functional well being (psychological well being and social well-being). Subjective Well Being (SWB) is a scientific term that refers to the meaning of happiness [Seligman, 2000].

When mother is unhappy or have a low level of SWB, then the mother can easily feel the negative such as anger, disappointment, and even depression. Research [Hay, 1998] showed that children of a depressed parent are likely to have emotional disorders compared with their peers. These children also have the possibility of depression are three times more likely than their peers. In addition, 40% of these children are at risk of experiencing a depressive episode before age 18 years [Garber, 2001]. Happiness is also very important for mothers because happiness is one of the main goals for human life. Aristoteles in his book "The Objective of Life" wrote that, the reason why happiness becomes the main purpose of human life is due to choose its own without any other reason [Oishi, 2007]. The philosophers also assume that happiness is the highest good and is the main motivation of the actions performed by humans [Kesebir, 2008]. The concept of happiness has been

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studied for a long time. There were some differences concept between one theory of happiness with another. For Aristotle happiness is the best circumstances, and the most pleasant thing [Delamonthe, 2005]. Betham has a slightly different opinion with Aristotle. Betham revealed that happiness consists of the pleasure and the absence of suffering [Oishi, 2007]. The theory of happiness today reveals that happiness can be realized when the individual has self-acceptance, environmental mastery, personal growth, and along with others [Ryff, 1989]; [Ryan, 2000]. As mentioned earlier, the term that can explain the happiness is SWB. SWB is the person's evaluation of cognitive and affective about his life. The evaluation includes an assessment of the various emotional experienced were consistent with the cognitive assessment of the satisfaction and fulfillment in life ([Diener, 2003]; [Kesebir, 2008]; [AbdelKhalek A & Lester, 2013]). [Diener, 2003] also states that SWB is a broad concept that includes the experience of positive feeling, low negative feelings, and the high life satisfaction. Various definitions of happiness and SWB above sourced from in Western countries which have the individualism characteristics. Indonesia is an east country that has collectivism characteristics. Therefore, the definition of happiness and SWB must be adapted to the culture of Indonesia.

2 Literature Review

Philosophers and social scientists, categorize the definition of happiness or well-being into three groups :. First, well-being defined based on external characteristics, such as virtue and purity. This definition indicates that, happiness is not regarded as the subjective state of the individual, but rather the judgment of others because individuals have some desirable qualities in life. Second, in defining happiness, social scientists focus on the question of what drives a person to have an evaluation that his life was positive. This definition leads to the concept of quality of life and this depends on the standards set by the individual about the good life. This definition is in accordance with the definition of happiness has been disclosed [Shin & Johnson, 1978], which is happiness a person's general assessment of the quality of life based on the criteria that he had previously set. Third happiness interpreted in accordance with the concept of happiness which is applied in everyday life which demonstrate the dominance of positive feelings than negative feelings. [Linley, 2004] states that happiness is to have and to feel pleasure. Similar to [Linley, 2004], [Snyder, 2007] states that happiness is a positive emotional state that is interpreted subjectively by each individual. The concept of SWB led to the definition of the second and third, that the life satisfaction and positive and negative emotional state. Subjective Well Being (SWB) is the study of happiness [Diener, 2000]. SWB is a scientific term that refers to the meaning of happiness [Seligman, 2000]. In this study, the word happiness is used interchangeably with the word Subjective Well Being. Subjective Well Being (SWB) is an evaluation of the individual's cognitive and affective life [AbdelKhalek A & Lester, 2013]. This is in line with [Diener, 2003] which defines SWB as an person's evaluation of cognitive and affective about his life. The evaluation includes an assessment of the various emotional experienced were consistent with the cognitive assessment of the satisfaction and fulfillment in life. [Diener, 2003] also states that SWB is a broad concept that includes the experience of positive feeling, low negative feelings, and the high life satisfaction. SWB refers to what is thought and felt by someone, which involves cognitive and affective conclusion, when the person evaluate his life [Seligman, 2000] .As according to [Snyder, 2007] SWB involves subjective evaluation of an individual regarding the state of his world. Meanwhile, [Keyes, 2002b] states that SWB is an index to measure the quality of life based on the individual's perception about his life.

3 Method

This research was conducted by a survey. Respondents who participated in this research were 147 working mothers and housewife, aged 20-55 years, with the last education at least junior high school. The open ended question in this survey was "what is happiness?". The data was analyzed using indigenous psychological approach of analyzing the content of open-ended responses, categorize the answers, and cross tabulating.

4 Result

Results Showed that there were four components of the meaning of happiness for Indonesian mothers. Those are: (1) the achievement of desire or goal (50.3%) (2) become part of the family (27.9%) (3) positive feeling as close to God (16.3%) (4) good marriage relationship (5.4%). The first meaning of happiness for indonesian mothers is the achieving desire or goal. The achieving desire or goal cover the achievement of personal desire like to have own free time, want to work and also the achievement of desires relating to children and the husband, as the child is healthy and smart, the husband was success, and so on. The second meaning of happiness for indonesia mothers is being part of the family. Being part of the family include the statements about getting together and doing activities

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together. The third meaning of happiness for indonesian mothers is Positive feelings because of the closeness to the Lord. This meaning include, a sense of sincerity and gratitude. The fourth meaning of happiness for indonesian mothers is good marriage relationship. The good marriage relationship involve the relationship with their husband, that is loving each other, mutual respect, and mutual support.

Category	Frequency	Percentage
The achievement of desire or goal	74	50.3
Become part of the family	41	27.9
Positive feeling because close with god	24	16.3
Good marriage relationship	8	5.4
Total	**147**	**100**

Table 1:

Based on age, it is known that the meaning of happiness category most appropriate to the age of 20-30 is become part of the family. The category of the meaning of happiness most appropriate at the age of 31-55 is the achievement of desire.

Based on the level of education it is known that the meaning of happiness of respondents junior high school education is part of the family. As for the meaning of happiness according to respondents who had high school, S1, S2, and S3 are dominated by the desire to achieve.

Based on the work status in 3, it is known that most working mother and housewife define the happiness as the achievemt of desire or goal.

Category	Occupation		Total	
	SMP	SMA	N	(%)
The achievement of desire or goal	40	34	74	50.3
Become part of the family	22	19	42	27.9
Positive feeling because close with god	13	11	24	16.3
Good marriage relationship	4	4	8	5.4
Total	**79**	**68**	**147**	**100**

Table 4:

5 Discussion

Results Showed that there were four components of the meaning of happiness for Indonesian mothers. Those are: (1) the achievement of desire or goal (50.3%) (2) become part of the family (27.9%) (3) positive feeling as close to God (16.3%) (4) good marriage relationship (5.4%). The existence of the meaning of happiness in women that is the achievement of desires,, suitable with the opinion of Emmons, Little, Freund and Klinger (in [Diener, 2003]), that having a goal is important for someone and progress towards the achievement of these goals is important for SWB. When become part of the family, the mother is also doing social relations ,. Social relationships is the primary function of human existence itself. Social relationships have a correlation with SWB [Diener, 2002]. In addition, individuals who are happy tend to have stronger social ties than individuals with less happy. Themes positive feeling because of its closeness to God involves gratitude and sincerity. When the individual closer to God then it can be said that the individual is religious. According to [Charlton, 2013]religiosity is how strong it seems one's religion, as indicated by the observance of religious rituals as well as the application level of adherence to the principles of religion in everyday life. Research reported that individuals who have high levels of religiosity which are likely to have mental health [Dezutter, 2006] In addition, religiosity also has a positive relationship with life satisfaction [Campbell, 1976]. The theme of good marital relations is emerging as the meaning of happiness, related to marriage and family satisfaction. According to ,family and marriage satisfaction was the strongest prediction of SWB Based on age, it is known that the [Campbell, 1976] meaning of happiness category most appropriate to the age of 20-30 are part of the family. This relates to the minimum age of marriage for women, that is 20 years old, who have been determined by BKKBN,. So at the age of 20-30 years, the age of marriage is still young. When the marriage is still young, the main purpose of marriage is to adjust to the other family members. The category of the meaning of happiness most appropriate at the age of 31-55 is the achievement of desire, it is because in general, the individu in 31-55 years old has been married longer so that, mothers have a lot of other desire than the adjustment in the family. Based on the level of education , it is known that the meaning of happiness respondents junior high school education is part of the family. As for the meaning of happiness according to respondents who had high school, S1, S2, and S3 are dominated by the desire to achieve. This shows that, the higher education which supports a person's ability to realize desire, and when people can make a wish come true, then they will feel happy. Based on the work status, both working mother and housewife define happiness most when they could achieve their desire or goal. This suggests that, although the working mother and the housewife have different status, but both of them had same desire. Desire about herself and desire related to the people they loved, such as have time for myself, I can work, and I can complete my re-

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sponsibilities and also wish that children, husband and parents are in the best circumstances, healthy, successful, and happy.

6 Conclusion

This study has revealed four meaning of happiness for Indonesian Mother. Most of meaning, related to family or group. This is suggest, that the four meaning of happiness for Indonesian mother in this research, in accordance with Indonesian culture, that have collectivism characteristic.

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Category	FrequencyPercentage							Total	
	20-25	26-30	31-35	36-40	41-45	46-50	51-55	N	(%)
The achievement of desire or goal	4	18	34	7	3	4	4	74	50.3
Become part of the family	4	21	7	3	3	1	2	41	27.9
Positive feeling because close with god	2	5	9	4	2	1	1	24	16.3
Good marriage relationship	0	1	3	2	0	0	2	8	5.4
Total	10	45	53	16	8	6	9	147	100

Table 2:

Category	Education					Total	
	SMP	SMA	S1	S2	S3	N	(%)
The achievement of desire or goal	0	19	39	13	3	74	50.3
Become part of the family	1	11	22	6	1	41	27.9
Positive feeling because close with god	0	4	15	5	0	24	16.3
Good marriage relationship	0	2	6	0	0	8	5.4
Total	1	36	82	24	4	147	100

Table 3:

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Indonesian Seaweed Market: an Answer to Overcrowding Challenge

Mathilde Munier
Researcher
muniermathilde@gmail.com

Abe Susanto
Direktur Deputi Seamolec
susantoabe@gmail.com

Abstract

The global community faces to many interdependent challenges, from the impacts of the current financial and economic crisis to an increasing of vulnerability to climate change.Fishing and aquaculture make a decisive contribution to the welfare and prosperity of human beings. With more than 240 millions of people, and the richest marine biodiversity on Earth, Indonesia is concerned by this challenge and can answer to it through the seaweed market and the seaweed farming.

Keywords :Seaweed, market, overcrowding challenge, indonesia

Today, the global community faces to many interdependent challenges, from the impacts of the current financial and economic crisis to an increasing of vulnerability to climate change. The global community must conciliate the need to answer to the urgent food and nutritional needs of a population in expansion with the limited character of natural resources and should protect natural resources. Fishing and aquaculture make a decisive contribution to the welfare and prosperity of human beings. With more than 240 millions of people, and the richest marine biodiversity on Earth, Indonesia is concerned by this challenge and can answer to it through the seaweed market and the seaweed farming.

With more than 81 000 Km of coasts thanks to more than 17 000 islands, Indonesia is one of the richest marine biodiversity on Earth. The potential surface for aquaculture in Indonesia is of 26 606 000 ha. Indonesia is located approximately between latitude 6°N and 11°S and longitude 95-141°E, surrounded by Indian Ocean at the west and the south, Pacific Ocean at the north-east, and South China Sea at the north. This confers to Indonesia a tropical climate with a tropical ecosystem containing 18% of the world's coral reefs, over 70 genera and 500 species of coral, 2500 species of fish, 2500 species of mollusc, 1500 species of crustacean, and a variety of other marine biota like algae [Huffard et al., 2012]. Indonesian population is increasingly dependent on marine resources for their food and work. In 2003, more than 2.000.000 people were imply in aquaculture industry, representing 40% of total workers of fishery sector. Aquaculture is an important field of Indonesian fishery, as this sector contributes to food security, employment generation, and a decrease of natural marine's resources exploitation [FAO, 2015a].

Seaweeds have a high upside potential to answer to the overcrowding challenge in several aspects. They are present all over the world and constitute an important biomass (world production is of 25 million tons in 2013) (FAO 2015a), are not in competition for land with traditional agriculture, have a high growth rates [E. et al., 2015], less consumption of water and a higher photosynthetic activity (6-8%) than terrestrial biomass (1.8-2.2%) [A.. et al., 2013]. Moreover they can be integrated to aquaculture IMTA [Santos et al., 2015] and biorefineries. Consequently, seaweeds provide a rapid and high return on investment [Valderrama et al., 2015].

Seaweeds or macroalgae are autotrophic organisms divided in three main groups regarding the pigment composition: green seaweeds (Chlorophyceae), brown seaweeds (Phaeophyceae) and red seaweeds (Rhodophyceae). Chlorophylls a and b are major pigments of green seaweeds whereas predominant pigments of brown seaweeds are xanthophylls and R-Phycoerythrin is the main pigment of red seaweeds. Nowadays, seaweeds are used in several applications in human food [Samaraweera et al., 2011], [Mc Hugh D.J. , 2003], cosmetics [Kim, 2011], fertilizers and animal food [Takash and Takahiko, 2009], human health [Kim, 2011] directly or indirectly through extraction of hydrocolloids (alginates, carrageenans). These complexes carbohydrates have a high added-value and are the main reason of macroalgae production. They are used in several areas from pharmaceutic, cosmetic, medicine, agronomy

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and others. Due to this wide range of applications, the seaweed industry has grown rapidly [Mc Hugh D.J. , 2003]. Indeed, in the fifties, the world seaweed production was only of 360.000 tons and only due to manual harvesting (94%). Then aquaculture grew progressively until 90's and in 2013, the seaweed cultivation industry represented 96% of the world seaweed production, with a production of more than 28 millions of tons (aquaculture and capture). From 70's to 2003, China was the first producer followed by Japan in the second place and Indonesia in the third place. But since 2003, Indonesia knows a production increasing that place the country in the second place. Moreover, in 2013 Indonesia is responsible of 33% of the total production with more than 9 million tons. In ten years Indonesia has grown from a production of 2.4% to 33% of the total production [FAO, 2015b]. According to UN export statistics, Indonesia's output continues to increase at a faster rate than other countries [Valderrama et al., 2015]. This second position gives to Indonesia a strategic and advantageous position in several seaweed markets directly or indirectly through hydrocolloids (human food, cosmetics, pharmaceutics, etc.) but also in others markets like the third biofuels generation. As bioethanol is by far the most widely used biofuel for transportation worldwide [Balat, 2011], the enhancement of seaweeds conversion to bioethanol would represent a new market area, currently underdeveloped world-wide.

Indeed, the bioethanol production from Indonesian seaweeds could enhance the seaweed market and consequently contribute to the development of the country. Indonesia produces more than 9 millions of tons in 2013 (threw cultivation) of the red seaweeds Kappaphycus alvarezii (and Eucheuma spp.) and Gracilaria spp.. Due to high carbohydrate content (respectively carrageenan and agar), these seaweeds are a potential feedstock for bioethanol production [E. et al., 2006], [P. et al., 2009]. However, as these species are produced for the food and hydrocolloids market, production of bioethanol from these seaweeds could compete with previous market and thus not contribute to an increasing production. Thus, some studies on bioethanol production from seaweeds have been done on seaweed wastes [Ge et al., 2011], [S. et al., 2013], [Tan and Lee, 2014], [Tan and Lee, 2015]. Indeed, hydrocolloid industry produced seaweed wastes that are not used and cause environmental pollution due to the low recycling capacity [Ge et al., 2011]. Consequently, this unexploited resource can be integrated in a biorefinery concept for simultaneous hydrocolloid and bioethanol production and thus led to the development of an economical biorefinery concept with zero-waste production [Tan and Lee, 2014].

The hypothesis is that seaweed wastes from Indonesian hydrocolloid market could be converted into bioethanol. According to literature, such project could be well integrated in Indonesia. Because of its position as the second biggest producer of seaweeds, consequently Indonesia produces a huge quantity of seaweed wastes. According to the carrageenan content in seaweed (from 35% to 60%) and the Eucheuma seaweed production in 2013 in Indonesia, it can be estimated that seaweed wastes represent from 3.3 to 5.4 million tons. This biomass is not easily used because seems to causing environmental pollution (due to carrageenan extraction process), only small part is used as fertilizer [Tan and Lee, 2014]. Consequently, conversion of seaweed waste to bioethanol could avoid these environmental problems. Moreover, carrageenan and bioethanol production in biorefinery concept can enhance the sustainability of seaweed industry and enhance economic benefits.

Considering that Indonesia produced more than 9 million tons of seaweeds in 2013 and that there is a large available farming area, it is a really economic, social and environmental option to develop a new non-food bioethanol seaweeds industry in Indonesia. To achieve this goal, significant basic research and development are required. Indeed, researches have to focus on species selection, on cultivation possibilities, on seaweed harvesting but also on a seaweed bioethanol production in a biorefinery concept and on pre-processing steps, cost-effective fermentation processes and market needs. A project like this fits perfectly to Indonesian seaweed industry. Indeed, it does not compete with the existing seaweed production and allows upgrading seaweed wastes allowing minimizing environmental impact. Moreover, this project lead to an increasing of the value added of seaweed industry through bioethanol production. It also contributes to development of the country both in terms of economy, environment and social by employment. This project is also in accordance with the Indonesian Ministry of Marine Affairs and Fisheries (MMAF) objective. Indeed, the main challenge is to ensure that marine resources are used sustainably and increase the value of the marine and fishery sector in order to increase the quality of life for Indonesian citizens [Huffard et al., 2012]. In this context, the Indonesian Government is committed to establish Marine Protected Areas (IMPAs) to reach 20 million hectares by 2020 (15.5 million hectares in 2012).

In conclusion, seaweeds constitute a biomass of the future by answering to the overcrowding challenge. Seaweed farming possesses lot of advantageous and has few limits. Indeed, seaweeds can directly feed humans and animals, or indirectly thanks to seaweed additives like phycocolloids and pigments. They are also a potential alternative to

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fossil energy, are not in competition for land with traditional agriculture, have a high growth rates, less consumption of water than terrestrial biomass, are all over the world and easy to cultivate. They synthesize bioactives metabolites for medical and pharmaceutical uses. Moreover they can be integrated to aquaculture IMTA and potentially in biorefineries.

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Digital Image Steganography with Integer Wavelet Transformation Technique on CIELab Colorspace with Optimum Pixel Adjustmet (OPA) Algorithm

Usman Rizal , Bandar Lampung University, usman.rizal@ubl.ac.id,
Jl. Nada Lestari C5 No.13, Beringin Raya, Kemiling,
Bandar Lampung , 081310925544

Abstract

Incredible progress in the field of information technology and telecommunications led to the emergence of demand for secure communication environment and have privacy. Steganography is a method used to disguise the existence of undisclosed information, making it difficult to detect its presence by a person who does not have the authority to such information. In addition, steganography can be applied to multimedia such as text, images, audio, video and protocol. problems that often arise in research on steganography is the low capacity of hiding, less robust, as well as the poor quality of stego-image is generated. This research aims to create a digital image steganography secure, has robustness, has high hiding capacity and has good imperceptibility, so the fidelity and recovery capabilities will be good anyway. The method proposed in this research combines Integer Wavelet Transform technique that aims to increase the capacity of hiding, to the algorithm Pixel Optimum adjustmen which also serves to improve the quality of stego-image. the research was conducted in the CIELab color space, where CIELab can produce digital images with high compression range and small color deviations on wavelet transform. In the watermarking technique in wavelet domain, CIELab has the most excellent robustness compared with other color spaces. For security measure, used steganalyzer's ROC performance, and measure PSNRvalue to determine imperceptibility, fidelity and recovery of stego-image is generated. Researchers born in Jakarta, college Bachelor of Informatics Engineering Program and graduate of Information Systems Management program at the University Gunadarma, and now currently continuing doctoral program of Information Technology at the University Gunadarma. Doctoral colloqium represents this research proposal is one of the publication conditions set by the ministry Higher Education and Research based on regulations in Indonesia.

Keywords : Steganography, Integer Wavelet Transform, Cielab colorspace, Optimum Pixel Adjustment

1 Introduction

Incredible development of information and communication technology have increased the demand for secure communication environment and have privacy [Al-Jbara et al., 2012]. Classic problems regarding the communication covert was first presented by Simons [Simmons, 1983], known as the prisoner's problem found in [Li et al., 2011] [Rafat and Sher, 2010] where Bob and Alice are prisoners were placed in solitary confinement, they can communicate through the medium of a guard named Wendi. This condition impossible they encrypt the message contains an escape plan that they convey through Wendi guards, because it will certainly lead to the suspicion of the guards. How does Bob to send a secret message to Alice without suspicion by the warden Wendy? Steganography is the solution.

Figure 1: Prisoner's Problem

Steganography is a technique to hide the existence of information on digital media in a media that does not have hidden information or suspicious-called Media stego / media cover, where Steganography can meet the interests of both legal and illegal. [Li et al., 2011] Speaking steganography means talking about information hiding technique. Some of this data hiding techniques developed for the purpose of preventing the theft of data, control the number of copies of documents, e-commerce, the protection of electronic

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transactions, secret communications and so on. [Brifcani and Brifcani, 2010]

Problems that often arise in research on steganography is the low capacity of hiding, less robust, as well as the poor quality of stego-image is generated. This research aims to (1) examine the use of techniques Integer Wavelet Transform algorithms using Optimum Pixel adjustment to the color space CIELab to get steganography digital images safe, robust, has a capacity of hiding high and has imperceptibility good, so the fidelity and the ability recovery was would be good too; (2) measuring the steganalyzer's security by using ROC performance and measure PSNR to determine imperceptibility, fidelity and recovery of stego-image is generated.

The method proposed in this research combines Integer Wavelet Transform technique that aims to increase the capacity of hiding to the algorithm Pixel Optimum adjustmen which also serves to improve the quality of stego-image. The research was conducted in the CIELab color space, where CIELab can produce digital images with high compression range and small color deviations on wavelet transform. In the watermarking technique in wavelet domain, CIELab has the most excellent robustness compared with other color spaces. For security measure, used steganalyzer's ROC performance, and measure PSNRvalue to determine imperceptibility, fidelity and recovery of stego-image is generated.

2 Literature

Some information hiding technique commonly known:

- Cryptography : hide the contents of the message in order that the message cannot be read by people who do not have the authority.
- Digital Watermarking : giving a watermark on the original document to prevent copyright violations.
- Steganography : hiding the existence message, aiming to avoid conspicuous.

Table 1: Information Hiding Techniques

Information Hiding Technique		
Kriptografi	**Digital Watermarking**	**Steganografi**

Steganography is derived from the Greek word, 'Steganos' and 'graphein', which means hidden writing (covered writing) [Rafat and Sher, 2010]. Steganography also be defined as the art of hiding communication by embedding secret messages into the document cover, such as digital images for example [Fridrich and Goljan, 2002]. Steganography is the art of hiding the fact when communication takes place, by hiding information in other so that no one besides the intended recipient knows of the existence of the message [T.A. and A., 2015]. This is the art of hiding a message in an envelope and without leave a trail of on the original message [Sharma and Sharmas, 2014]. Steganography history began with media heads slave (narrated by Herodotus, the authorities in Greece in 440 BC in the book: Histories of Herodatus). Histaeus slave shaved head, tattooing a message on the scalp, the hair is allowed to grow slaves, slaves were sent. Slaves in the recipient's head were shaved so that the message can be read [Sharma and Sharmas, 2014].

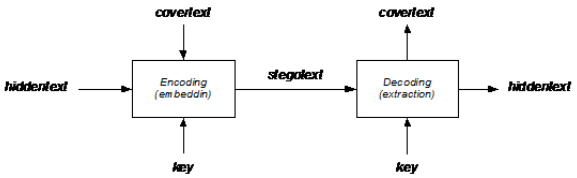

Figure 2: Steganography Model

Properties on steganography are: (1) embedded message (hidden-text): the hidden message, can be text, images, audio, video or protocol. (2) cover-objects (cover-text): the message that is used to hide the embedded message, can be text, images, audio, video or protocol. (3) stego-object (stego-text): image / object that already contains an embedded message, (4) stego-key: the key that is used to insert and extract the message from the stego-text messages.[Sharma and Sharmas, 2014]

Three criteria to assess the performance of steganography techniques, are: (1) security, where steganography should be safe from a variety of active and passive attacks. If the existence of the secret message cannot be predicted with higher probability than random guesses steganalysis systems, then the steganography can be said secure. To measuring of the safety performance we can use steganalyzer's ROC performance to identify the presence or absence of embedded media that allegedly confidential data, (2) capacity, are so useful to convey secret messages, the capacity of the hidden provided by steganography should be as high as possible, which can be given in absolute measurements (such as the size of the secret message), or the relative value (called the insertion rate of data, such as bits per pixel, bit per non-zero coefficient transform cosine discrete, or the ratio of a secret message to the media cover, etc), (3) imperceptibility, are the existence of the secret message cannot be perceived by the human senses. Related to imperceptibility here is fidelity, that quality of steganography media after the in-

sertion process the message should not be changed significantly, as well as recovery, that message must extractable whenever needed [Li et al., 2011] [Zakaria and Munir, 2015]. Steganography can be implemented in almost all types of multimedia files (text, images, audio and video), but the most commonly used is the digital image, because the exchange of data in the form of digital images on the Internet is quite high, so that it can reduce the level of suspicion of hidden messages which has been inserted. [Zakaria and Munir, 2015]

Problems often appeared in research on steganography, among others, the low capacity of hiding, less robust and low quality of stego-image is generated. Two schemes commonly used to create a digital image steganography have advantages and disadvantages of each. Insertion techniques in spatial domain, for example, is a technique Least Significant Bit (LSB) substitution, has an advantage in that high-the capacity of hiding and easy to control the quality of stego-image, but weak in robustness and also has a low imperceptibility. Other schemes transform domain is a technique that can cover weaknesses that exist in the spatial domain insertion technique. One of the techniques that are frequently used domain transform is discrete cosine transform (DCT), which is commonly used in the compression of JPEG images and MPEG image.

There is also a discrete wavelet transform and discrete Fourier transform, which are widely used in the current study were applied to image compression with JPEG2000 and MPEG4 formats. Advantage techniques transform domain than the spatial domain techniques is their ability to tolerate the noise is quite high for some signal processing operations. However, they also have the disadvantage of a high computational complexity that makes them slower, and the low capacity of hiding.

Thus, to get over these disadvantages, the present paper, the use of optimum pixel adjustment algorithm to hide data into integer wavelet coefficients of cover image in order to maximize the hiding capacity as much as possible. We also used a pseudorandom generator function to select the embedding locations of the integer wavelet coefficients to increase the system security.[Jayasudha, 2013]

Generally wavelet domain allows us to hide data in regions that the human visual system (HVS) is less sensitive to, such as the high resolution detail bands (HL, LH and HH), Hiding data in these regions allow us to increase the robustness while maintaining good visual quality. IWT maps an integer data set into the another integer data set. In discrete wavelet transform, the used wavelet filters have floating point coefficients so that when we hide data in their coefficients any truncations of the floating point values of the pixels that should be integers may cause the loss of the hidden information which may lead to the failure of the data hiding system [T.A. and A., 2015]. To avoid problems of floating point precision of the wavelet filters when the input data is integer as in digital images, the output data will no longer be integer which doesn't allow perfect reconstruction of the input image [Wu et al., 2000] and in this case there will be no loss of information through forward and inverse transform [T.A. and A., 2015]. Due to the mentioned difference between integer wavelet transform (IWT) and discrete wavelet transform (DWT) the LL sub band in the case of IWT appears to be a close copy with smaller scale of the original image while in the case of DWT the resulting LL sub band is distorted. Lifting schemes is one of many techniques that can be used to perform integer wavelet transform it is also the scheme used in this paper. The following is an example showing how we can use lifting schemes to obtain integer wavelet transform by using simple truncation and without losing inevitability. [Jayasudha, 2013]

The Haar wavelet transform can be written as simple pair wise averages and differences:

$$S_{1,\,n} = (S_{0.2n} + S_{0.2})/2$$

$$d_{1,\,n} = S_{0.2} - S_{0.2} \tag{1}$$

Where Si, 1, di, 1 is the n-th low frequency and high frequency wavelet coefficients at the Ith level respectively. It is obvious that the output is not integer, the Haar wavelet transform in (1) can be rewritten using lifting in two steps to be executed sequentially:

$$d_{1,\,n} = S_{0.2n+1} - S_{0.2n}$$

$$S_{I,\,n} = S_{0.2n} + d_{1.n12} \tag{2}$$

From (1) and (2) we can calculate the integer wavelet transform according to:

$$d_{1.n} = S_{0.2n+1} - S_{0.2n}$$

$$S_{I.n} = 0.2n + (d1, n/2) \tag{3}$$

Then the inverse transform can be calculated by

$$S_{0.2,n} = S_{I.n} - (d1, n/2)$$

$$S_{0.2n+1} = d_{1,n} + S_{0.2,n} \tag{4}$$

Usually steganography research with wavelet transform technique is performed on the RGB color space. But in this study, the wavelet transform performed in CIELab color space, where CIELab can produce digital images with high compression range and small color deviations on wavelet transform. In the watermarking technique in wavelet domain, CIELab has the most excellent robustness compared with other color spaces. [Schanda,]

2.1 CIEL*a*b* 1976

CIELab is defined CIE color space also in 1976 (CIE 1976 L*a*b*) is the formula of a second after CIELuv; The second CIELuv and CIELab color space conversion function that has an 1:1, so the color space is identical, only the appearance of different magnitudes.

By CIELab we start given the view and the meaning of each dimension is formed, namely:

- Magnitude CIE_L* to describe the brightness of the color, 0 for black and L* = 100 for white),
- Dimensions CIE_a* describes the kind of green color - red, where a negative number a* indicate green and vice versa CIE_a* indicates positive red color,
- Dimensions CIE_b* for the kind of blue color - yellow, where the number of negative b* indicates blue and vice versa CIE_b* indicates a positive yellow color.[Schanda,]

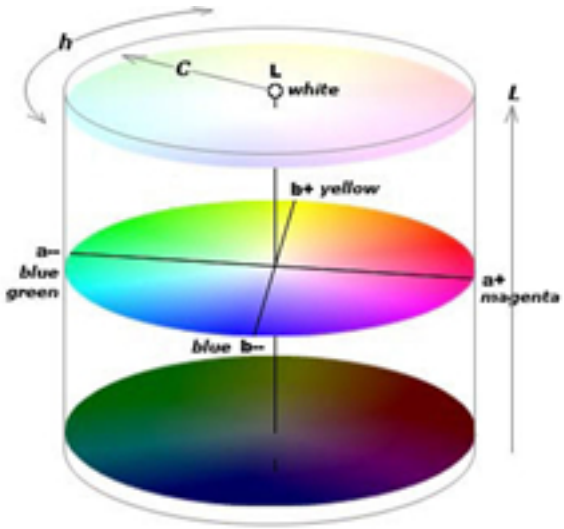

Figure 3: CIEL*a*b* color model

Because CIELab is also a three-dimensional model, then CIELab can only be described correctly if the three-dimensional space, and if we take slices of components a * and b *, then we will get a chromaticity diagram a * b *.

Chromaticity diagram a* b* in addition to better explain the wide chromaticity a* b* on the level of brightness (CIE_L*) certain, namely CIE_L* = 75, CIE_L* = 50 and CIE_L* = 25. At maximum brightness level and minimum CIE_L* = 0 field of chromaticity a * b * becomes small near 0, so simply we can imagine that the CIELab color model such as a spherical shape. [Schanda,]

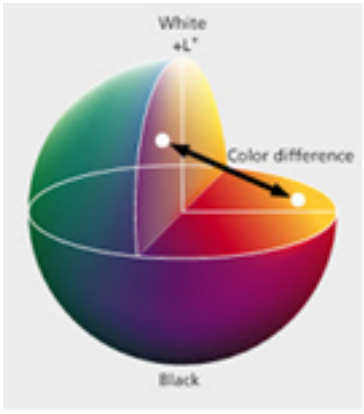

Figure 4: CIEL*a*b* color 3D model

The neutral point position CIE_a* = CIE_b* = 0 (line achromatic) Keep in mind that the color space is a derivative of the color space "seed" CIEXYZ that have long been defined by the CIE itself. Space is the most popular color used in the field of Color Management System in the graphics industry. CIELab also has a cylindrical model is CIELCh ab which has almost the same meaning CIELCh $_{uv}$.

CIEL*a*b* (CIELab) is the most complete color space. Color space describes all colors that can be seen by the human eye and is made such that it is independent does not depend on the tools and processes, so that the ICC - International Color Consortium using color space CIEXYZ and CIELab as the basis for calculating color communication (PCS - Profile Communication Space) the Color Management System, and CIELab is used to describe the color, the color difference and tolerance in the international standard ISO 12647.[Schanda,]

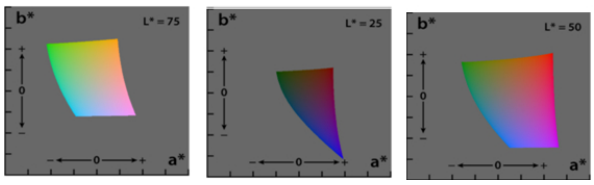

Figure 5: Diagram Chromaticity a*b*

3 Proposed Methods

In this research method is proposed to create a model of Digital Image Steganography Technique Using Integer Wavelet Transformation In CIELab color space with Optimum Pixel Algorithm (OPA):

3.1 Insertion Algorithm

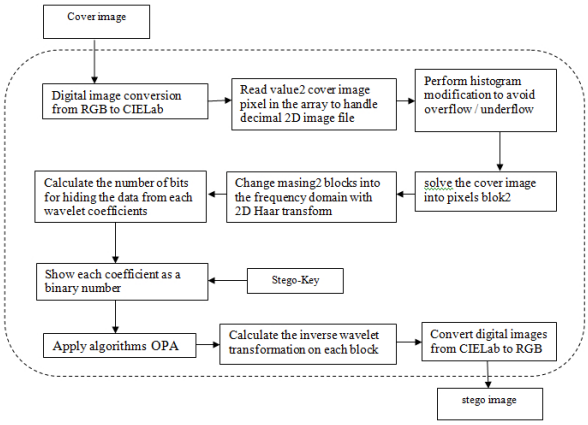

Figure 6: Embedding Process

Blocks the insertion of the algorithm described in the following stages:

Step 1 :

Digital image conversion from RGB to CIELab color space with the following formulation:

$$\begin{bmatrix} X \\ Y \\ Z \end{bmatrix} = \begin{bmatrix} 0.412 & 0.358 & 0.180 \\ 0.213 & 0.715 & 0.072 \\ 0.019 & 0.119 & 0.950 \end{bmatrix} \cdot \begin{bmatrix} R \\ G \\ B \end{bmatrix} \quad (1)$$

$$L^* \begin{cases} 116(Y/Y_n)^{1/3} - 16 & (Y/Y_n) > 0.008856 \\ 903(Y/Y_n)^{1/3} & (Y/Y_n) \le 0.008856 \end{cases} \quad (2)$$

$$\begin{cases} a^* = 500[f(X/X_n) - f(Y/Y_n)] \\ b^* = 200[f(Y/Y_n) - f(Z/Z_n)] \end{cases} \quad (3)$$

$$f(q) = \begin{cases} q^{1/3} & (q > 0.008856) \\ 7.787q + 16/116 & (q \le 0.008856) \end{cases} \quad (4)$$

dimana $X_n = 95.047$, $Y_n = 100$, $Z_n = 108.883$

Step 2:

Read the cover image file into a two dimensional decimal array to handle the file data more easily.

Step 3:

Perform histogram modification to prevent the occurrence of overflow/underflow when value is converted into an integer wavelet coefficients which yields the value pixel stego-image exceeds the value of 255 or less than 0. New problem found was caused by a value approaching 255 or 0.

Step 4:

divide the cover image into 8 x 8 blocks that do not overlap. With this Division, each 8 x 8 block can be found as a complex block.

Step 5:

Transform each block to the transform domain using 2D Haar integer wavelet transform resulting LLI, LHI, HLI and HHI.

Step 6:

Count the number of bits for the concealment of data from each of the wavelet coefficients.

Step 7:

Embed L bits of message into the corresponding randomly chosen coefficients. Random selection of coefficients provides more security where the sequence of the message is only known to both sender and receiver by using a previously agreed upon secret key.

Step 8:

Apply the Optimum Pixel Adjustment algorithm. The main idea of the use of the algorithm is to minimize the difference error between the original coefficient values with values that are changed by checking bits LSB right to modifications that changed the results will be minimal. This algorithm is the final step of the proposed scheme, in which the algorithm can minimize errors up to half. The main idea of the algorithm is checking bits OPA right side next to the end of the exchange LSB is used to reduce the bit error results after insertion of the message.[Jayasudha, 2013]

Step 9 :

Calculate the inverse integer wavelet transformation on each block of 8x8 to save images to the spatial domain.

Step 10 :

Convert the digital image of the results of the previous steps from CIELab to the RGB color space with the following formulation:

$$X = Xn * (P + a^* / 500)^3 \quad (9)$$

$$Y = Yn * P^3 \quad (10)$$

$$Z = Zn * (P - b^* / 200)^3 \quad (11)$$

dimana $P = (L^* + 16) / 116$

$$\begin{bmatrix} R \\ G \\ B \end{bmatrix} = \begin{bmatrix} 3.240 & -1.537 & -0.498 \\ -0.969 & 1.875 & 0.041 \\ 0.055 & -0.204 & 1.057 \end{bmatrix} \cdot \begin{bmatrix} X \\ Y \\ Z \end{bmatrix} \quad (12)$$

Extraction algorithm

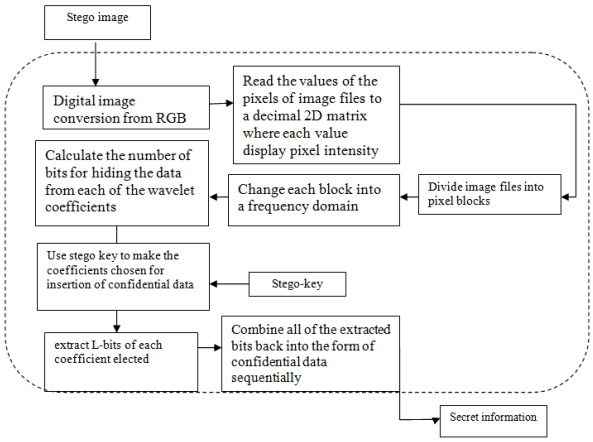

Figure 7: Extraction Process

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Web Based Cooperation Report for Higher Education

Andreas Hadiyono
Management Information System
Universitas Gunadarma
andre_hadiyono@staff.gunadarma.ac.id

Lu'lu Mawaddah Wisudawati
Management Information System
Universitas Gunadarma
lulu_mawadah@staff.gunadarma.ac.id

Rizky Tri Anggara
Organizartional and Industrial
Psychology
Universitas Gunadarma
Anggara@staff.Gunadarma.ac.id

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Andreas Hadiyono, Lulu Mawadah, Rizky Tri Anggara

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IT Governance Framework Adoption And Acceptance: a Literature Review And Research Framework

Widya Cholil
Gunadarma University, Indonesia
widya_neo@yahoo.com,
widya@binadarma.ac.id

Abstract

Despite increased research interest on IT Governance framework , existing research has not adequately addressed two key issues concerning the implementation and integration of IT Governance Framework systems: a better understanding of the factors influencing the adoption and acceptance of IT Governance Framework systems, and a better understanding of the factors that influence the effective usage of these systems. The objective of the present paper is to lay the groundwork for the development of a theoretical framework of IT Governance Framework systems implementation. Based on an extensive review of the literature the paper provides a synthesis of existing empirical findings and theoretical perspectives related to IT Governance Framework adoption and presents the premises of a conceptual model that reflects the multi-dimensional nature of the acceptance and use of IT Governance Framework systems.

Keywords :IT Governance Framework adoption, IT Governance Framework acceptance, IT Governance Framework integration, Theory of Complementarities, Capability theory, Public administration transformation, IT implementation

1 Introduction

Information Technology Governance framework refers to the use of information technologies (IT) to improve the efficiency,effectiveness, transparency and responsibility of public governments [Kraemer and Leslie King, 2003];). Viewed as radical, yet unavoidable transformation projects ([Jaeger, 2003]), the implementation of IT Governance Framework systems has been attracting increased research interest, and is believed to constitute one of the most important IT implementation and organizational change challenges of the future ([Warkentin et al., 2002]; [Marche and McNiven, 2003]). According to some estimates, IT Governance Framework systems are already helping save 2% of the annual US GDP (UNDP,2001). However, the realized savings are still far less than what is potentially possible. For example, World Bank (2000) figures indicate that even the countries that are most advanced in the implementation of IT Governance Framework systems are able to capture only 20% of their real savings potential. Moreover, implementation failures of IT Governance Framework systems are also common and often lead to adverse financial consequences (e.g. the Gires project in Québec or the Canadian Firearms Registry which cost 400M$ and 1 billion $, respectively) ([Radio Canada, 2003]).

Despite the potentially significant impacts of IT Governance Framework systems on public administrations, organizations, individuals and society, there is presently a dearth of systematic and thorough studies on the subject ([Jaeger, 2003]; [Kraemer and Leslie King, 2003]). In addition, the research themes, as well as the research approaches and perspectives employed in the study of IT Governance framework implementations also exhibit significant diversity, making it difficult to reach conceptual clarity on the subject ([Grönlund, 2005a]). Finally, several authors remain skeptical ([Kallinikos, 2003, Kallinikos, 2004]; [Kraemer and Leslie King, 2003]) regarding the relevance of a radical transformation of the public bureaucratic model, with others seriously questioning the viability of the outcomes that result from IT-led transformations of institutionalized governmental processes ([Ciborra, 2005]; [Du Gay, 2003, Du Gay, 2004]; [Kallinikos, 2004]; [Stokes and Clegg, 2003]).

Given the importance and complexity of the topic, and the lack of published comprehensive literature reviews of IT Governance Framework adoption and acceptance, the present paper provides asynthesis of existing empirical findings and theoretical perspectives on this subject, and presents the theoretical premises of a conceptual framework that reflects the multi-level and multidimensional

nature of the adoption and acceptance of IT Governance Framework systems.

The paper is organized as follows: the first section presents an analytical framework for conducting the literature review, the second section describes the main findings from this review, and the third section provides a discussion of the findings and the conclusions of the study.

2 Past Research On IT Governance Framework Adoption And Acceptance

Three data sources provided the input for our literature review of IT Governance Framework adoption and acceptance:

1. ABI/INFORM, and the ACM digital library,
2. Government Information Quarterly, Information Systems Research, International Journal of Electronic Government Research, Journal of MIS, MIS Quarterly, Organization Studies, Organization Science, Public Administration Review, and Social Science Computer Review,
3. AMCIS, ICIS and HICSS conference proceedings.

Our search targeted the identification of articles published since 1990 that presented either :

1. Reviews and studies of IT Governance Framework adoption or acceptance in the IS domain, or
2. Reviews and studies of IT Governance Framework adoption or acceptance in the public administration field, or
3. Reviews and studies related to IT enabled organizational change in the public sector.

It should be noted that electronic government is a multi-faceted concept that can involve four types of stakeholders (government, citizens, businesses, and employees) in five use contexts: Government-to-Citizen (G2C), Government-to-Business (G2B), Government-to-Employee (G2E), Government-to-Government (G2G), and Internal Efficiency and Effectiveness of IT Governance Framework systems (IEE). While past IT Governance Framework implementation efforts have focused mainly on internal efficiency and effectiveness (IEE) ([Kraemer and Leslie King, 2003]), current IT Governance Framework initiatives are more centered on networked electronic provision of services to the four types of stakeholders identified above. The present review includes all studies related to IT Governance Framework adoption and acceptance in the five different use contexts listed above.

As the present review is specifically focused on IT Governance Framework adoption and acceptance, it represents a more focused and fine-grained complement to recent reviews of the more general IT Governance Framework literature (e.g., [Andersen and Henriksen, 2005]; [Grönlund, 2005b]; [Norris and Lloyd, 2006]). In fact, the adoption and acceptance studies targeted by the present search correspond to two of the four IT Governance Framework contextual research domains identified by Andersen and Henriksen([Andersen and Henriksen, 2005]):

1. Diffusion management and
2. Administrative e-servicesi.

Further, our search specifically selected articles published in top IS, public administration and organization studies journals, as well as in top IS academic conference proceedings. Although European, Asian, or other specific regional IS conferences were not included in the search, the contributions of international research on IT Governance Framework adoption were well represented in the surveyed peer-reviewed publications. Note also that the present search did not take into account research published in monographs, or in other specialized IT Governance Framework journals (e.g. Electronic Journal of e-Government, Journal of IT Governance Framework) or conferences (e.g. DEXA/EGOV; d.go). While acknowledging these limitations, the variety and quality of the publications included in the present search is thought to provide an adequate and reliable sample of existing research on IT Governance Framework adoption and acceptance. It is interesting to note that 52% of the papers identified in Andersen and Henriksen's (2005) review were in the two categories mentioned above, corresponding approximately to 86 out of the 167 papers they found.

Our literature search identified some articles related to IT Governance Framework adoption and acceptance that conceptually map onto Andersen andHenriksen's ([Andersen and Henriksen, 2005]) two categories. This suggests that the present review appears to have adequately captured past research on IT Governance Framework adoption and acceptance. However, it should be acknowledged that, while our review aimed at synthesizing a significant portion of egovernment adoption and acceptance research, it inevitably left out some segments. For instance, work on IT Governance Framework cultural barriers ([Margetts and Dunleavy, 2002]), or on complex egovernment change processes and mechanisms ([Dunleavy and Margets, 2000]; [Dunleavy and Margets, 2000]) were not included in the present review because of their specialized publication outlet. A few other specialized journals, monographs and conferences were also excluded.

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The collected papers were content analyzed following a three step procedure. First, based on an emergent coding method ([Allard-Poesi, 2003]), preliminary analysis of the articles' abstracts was conducted and led to the inference of the five main research themes. Second, the selected articles were carefully read and analyzed by the first author. Third, the face validity of the paper classification categories and theme inferences was separately assessed by both authors. Note that while both authors agreed on the classification of the articles, an inter-rater reliability score was not calculated. While the absence of a formal inter-rater score represents a limitation to the inferences drawn, the detailed description of each article's content enables a relatively straightforward assessment of the face validity of the proposed framework.

Five topic categories were identified to broadly represent the subject matter investigated by the 99 articles:

1. The influence of managerial practices on IT Governance Framework adoption and acceptance;
2. The influence of organizational and individual characteristics on IT Governance Framework adoption and acceptance;
3. The influence of governmental subcultures on IT Governance Framework adoption and use;
4. The influence of IT characteristics on IT Governance Framework adoption and acceptance; and
5. The assessment of IT Governance Framework impacts.

The articles of each category are listed with the content of each article presented based on the concept-centric approach suggested by Webster and Watson ([Webster and Watson, 2002]), using the following elements:

1. Theoretical framework,
2. Methodology,
3. Level of analysis,
4. Technology,
5. Variables or key concepts, and
6. Main results or arguments.

Topic 1. The influence of managerial practices Research related to the influence of managerial practices on IT Governance Framework adoption and acceptance aims at the identification and/or measurement of specific management strategies and behaviors that are thought to significantly affect IT Governance Framework adoption and acceptance either by governmental agencies or by citizens and businesses. For example, a practice that has received significant research attention and that is posited as having an important effect on governmental agencies' adoption is process reengineering. Several authors ([Cahill, 2006]; [Golden et al., 2003]; [Kawalek and Wastall, 2005]; [Scholl, 2003] [Scholl, 2005]; [Thong et al., 2000]) have empirically shown that the absence of a clear and well executed process reengineering strategy significantly hinders IT Governance Framework adoption and success. Related to this factor, there is also the influence of management support and leadership ([Chan and Pan, 2003]; [Homburg and Bekkers, 2002];
[Ke and Wei, 2004]; [Pardo and Scholl, 2002]). For example, Thong et al. ([Thong et al., 2000]) found that management support was a significant factor that influenced IT Governance Framework acceptance. Chan and Pan ([Chan and Pan, 2003]) also found that leadership was a key resource in IT Governance Framework acceptance. In the same vein, Gauld ([Gauld, 2007]) identified 14 ill-managed elements that explained the implementation failure of an IT Governance Framework system. Similarly, the establishment and exercise of a formal governance structure, as well as the perception of neutrality vis-à-vis this structure ([Thong et al., 2000]) were also found to be major enabling factors of IT Governance Framework adoption and usage. Moreover, several authors ([Davison et al., 2005]; [Esteves and Joseph, 2006];
[Layne and Lee, 2001]; [Tan et al., 2005]) have proposed IT Governance Framework development stage models, and suggested the presence of different adoption enabling factors, adoption inhibiting barriers, implementation challenges, and intervention strategies for different maturity stages. Finally, some authors have also argued that egovernment acceptance was significantly enhanced when all stakeholders were involved in the process ([Chan and Pan, 2003]; [Esteves and Joseph, 2006];
[Jain and Patnayakuni, 2003]). For example, Jain and Patnayakuni ([Jain and Patnayakuni, 2003]) posited that the most legitimate IT Governance Framework stakeholder, i.e. the public, was left out of the critical conceptualization, development and implementation phases of egovernment.

In sum, managerial action appears to play a key role in facilitating the critical aspects of process reengineering and integration, and in developing the main governmental capacities for adaptation and innovativeness. Little is known however about the specific actions managers need to undertake in order to foster organizational innovativeness via new knowledge acquisition, assimilation, transfor-

mation and exploitation ([Boynton et al., 1994]; [Zahra and George, 2002]), or about the practices they need to undertake in order to positively influence and sustain egovernment adoption and acceptance. Topic 2. The influence of organizational and individual characteristics Research related to the influence of organizational or individual characteristics attempts to identify the attributes that explain how or why dissimilarities among individuals or governmental agencies influence their adoption and acceptance of IT Governance Framework systems. For example, one organizational characteristic that is thought to significantly influence the adoption of egovernment is red tape (excessive bureaucratic regulation). While some authors have found red tape to be negatively related to organizational adoption ([Bretschneider and Wittmer, 1993]; [Moon, 2002]), others observed no significant relationship between red tape and egovernment adoption (Welch and Pandey, 2005) although red tape was found to be significantly and negatively associated with information quality. Size is another organizational factor that has been shown to affect IT Governance Framework adoption. For example, Norris and Moon (2005) found that adoption of web sites was strongly related to local government size. Similarly, Caudle et al. ([Caudle et al., 1991]) found that small government agencies were more interested in technology transfer than large agencies. Further, Ho ([Ho, 2002]) argued that extended adoption and usage of IT Governance Framework systems was hindered because of the IT Governance Framework “paradigm”, which emphasizes coordinated network building and one stop customer service, thus contradicting the bureaucratic paradigm, which emphasizes standardization and division of labor.

A significant research stream within this topic group has nvestigated the influence of IT Governance framework on performance characteristic on IT Governance adoption by following the tradition of the theory of Reasoned Action ([Fishbein and Ajzen, 1975]) and The Technology Acceptance Model (TAM) ([Davis, 1989]) Accordingly, the influence of Organization Performance on IT Governance framework though to be mediated by their beliefs and attitudes. For example, Phang et al. (2005) found that perceived usefulness of web sites was the most significant predictor of senior citizens’ intention to adopt them. Contrary to Doellman et al. (2006), Phang et al. ([Phang et al., 2005]) and Gilbert et al. ([Gilbert et al., 2004]) who didn’t find support for the influence of citizen’s perceived ease of use on adoption, Carter and Bélanger ([Carter and Bélanger, 2005]) found that perceived ease of use had a significant effect on citizens’ intention to use. They also found a significant relationship between compatibility and intention to use, and between perceived trustworthiness and intention to use. Similar to Carter and Bélanger ([Carter and Bélanger, 2005]), Hung et al. ([Hung et al., 2006]) found that perceived ease of use had a significant influence on tax payers’ attitude towards usage. Furthermore, several researchers have studied the construct of trust as an antecedent of IT Governance Framework adoption by individuals. For example, Bélanger and Carter’s ([Bélanger and Carter, 2005]) field survey found that "institution-based trust" and "characteristic-based trust" had a significant influence on citizens’ intention to use "government online." Similarly, Lee, Braynov and Rao ([Lee et al., 2005]) found that "trusting beliefs in IT Governance Framework" had a significant effect on citizens’ "intention to use," "intention to provide personal information" as well as on "intention to depend on information" provided by IT Governance Framework services. Moreover, Lee and al. (20[Lee et al., 2005]) also found that "Internet competence belief" had a significant indirect effect on intention to use, and that "trust in government" had a significant influence on "IT Governance Framework authority goodwill." Gefen et al.([Gefen et al., 2002]) conceptualized trust’s influence on intention to use by citizens to be mediated by perceived usefulness and perceived ease of use, and found that trust had a significant effect on both perceived usefulness and ease of use.

Moreover, studying IT Governance Framework adoption at a national level, Srivastava and Teo ([Srivastava and Teo, 2006b], [Srivastava and Teo, 2006a]) found that ICT infrastructure, technology development and the quality of human capital had a significant effect on IT Governance Framework development. Finally, some studies adopted an interpretive approach to tackle the complex phenomena underlying IT Governance Framework adoption. For example, Sorrentino ([Sorrentino, 2005]) argued that, by taking into account overlooked factors such as "the degree of autonomy/heteronomy of actors, their levels of discretionary power and the coordination arrangements among them" (p. 2), a process-oriented perspective provides a richer understanding of IT Governance Framework implementation and adoption. In the same vein, Scatolini and Cordella ([Scatolini and Cordella, 2005]) found, through an action research study, that the "defense of political bonds" was the most salient resistance factor to IT adoption in a government setting. They also found that "organizational climate" and "decision making and responsibility assumption" were strong determinants of organizational innovation.

In sum, the importance of organizational and individual characteristics on IT Governance Framework adoption appears to have been clearly es-

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tablished. However, future research related to the influence of these factors would probably gain much explanatory power if more longitudinal studies were conducted and if institutional factors ([Gasco, 2003]) were simultaneously considered as possible salient influences affecting organizational or individual intention to adopt IT Governance Framework systems. Topic 3. The influence of subcultures Studies related to the cultural characteristics of public administration ([Drake et al., 2004]; [Schedler and Scharf, 2000]) focus on explaining how the artifacts, values, symbols and basic beliefs in the public sector influence the nature and the consequences of IT Governance Framework adoption and acceptance.

For example, Drake et al. ([Drake et al., 2004]) showed the co-existence and co-evolution of three principal subcultures in public administration:

1. A scientific culture,
2. A political culture and,
3. A bureaucratic culture.

According to Drake et al. ([Drake et al., 2004]), the differences between these three governmental subcultures can help explain the different design and information sharing modes that are found in governmental administrations. Whereas the members of a scientific culture tend to see information as a means of connectivity that binds them to bodies of knowledge or communities of practice aiming at resolving problems, members of a political culture are essentially interested in knowing how information could help them influence political and legislative processes. On the other hand, members of a bureaucratic culture tend to see information as a convenience that constitutes the foundation of effectively managing public administration.

As such, the existence of cultural differences regarding the adoption and use of information and data within public administration points to two important considerations. First, it suggests that it is important to take into account task-technology fit ([Goodhue, 1995]), i.e. the fit between the various tasks of the different subcultures and the IT being implemented. Second, it shows the importance of carefully assessing the interrelationships between cultural variables and other salient factors influencing IT Governance Framework adoption and use.

Topic 4. The influence of IT characteristics Studies grouped within this stream of research investigated the influence of IT design features on individuals' acceptance and use of IT Governance Framework applications. For example, several authors have shown that data security, accessibility, and perceived confidentiality significantly influenced individuals' adoption of IT Governance Framework services ([Jaeger, 2003]; [Jaeger, 2006]; [Lee et al., 2003]; [Warkentin et al., 2002]) and that government websites generally neglected website accessibility for citizens with cognitive impairement and learning disabilities ([Jaeger, 2006]).

Other researcher within this stream includes studies of the influence of specific application models and algorithms on public managers' and politicians' decision-making process ([Henderson and Schilling, 1985];[Lakshmi et al., 1990]), and research that investigated the relationship between IT characteristics and IT diffusion in the public sector. For example, Northrop (2003) found that very few applications had interactive or transactional characteristics, thus hindering extensive participation of the citizens to the political life.

Topic 5. Assessing the impacts of IT Governance Framework Studies related to this stream focus on assessing the consequences of IT Governance Framework adoption and use. While there is agreement among researchers regarding the importance of measuring egovernment impacts systematically, some discord remains about which methods to employ and which metrics to use ([Chircu and Hae-Dong Lee, 2003]; [Gupta and Jana, 2003];[Lee, 2005]). Several researchers argue that the relationship between the adoption of IT Governance Framework systems and their consequences is very complex and should be understood as emergent and context-dependent ([Robey and Holmström, 2001]; [Robey and Sahay, 1996]; [Waddel and Borning, 2004]). For example, several studies of the implementation of specific IT in the public sector (e.g., OLAP in 2001, GIS in 1996, and UrbanSim in 2004) found that the anticipated results of adoption did not materialize. Similarly, a survey of municipalities found that the cost reduction and downsizing benefits expected from IT Governance Framework adoption did not materialize due to structural, legal, human and organizational barriers ([Moon and Bretschneider, 2002]). Along the same vein, other researchers found that IT enabled municipality downsizing only when the technology was aligned with implementation strategy, and was well integrated with organizational processes ([Pinsonneault and Kraemer, 2002]). Likewise, Tolbert and Mossberger ([Tolbert and Mossberger, 2006]) found that perceived government transparency, accessibility and responsiveness were significantly influenced by citizens' use of IT Governance Framework systems. Furthermore, other researchers have suggested that the assessment of IT Governance Framework impacts should take into account both tangible and intangible benefits, thereby combining both"hard and soft" performance measures ([Gupta and Jana, 2003]). Consistent with this line of thinking, Saxton et al. ([Saxton et al., 2007]) proposed a logic model for identifying IT Governance Framework benefits

at the individual, organizational and societal levels. Finally, some researchers have argued that egovernment benefits can only be captured when linkages are made between the benefits of egovernment systems and the stage of evolution of IT Governance Framework ([Gupta and Jana, 2003]; [Layne and Lee, 2001];[Moon and Bretschneider, 2002]).

3 A Research Framework of IT Governance Framework Adoption And Acceptance

Our literature search identified some articles published between January 1990 and February 2007 onIT Governance Framework adoption and acceptance. Compared to previous literature reviews on IT Governance Framework ([Andersen and Henriksen, 2005]; [Grönlund, 2005a]; [Norris and Lloyd, 2006]), the present search adopted a drill down approach by specifically focusing on findings related to IT Governance Framework adoption within two contextual IT Governance Framework research domains identified by Andersen and Henriksen ([Andersen and Henriksen, 2006]):

1. Diffusion management and
2. Administrative e-services.

Contrary to Grönlund ([Grönlund, 2005a]), but consistent with Andersen and Henriksen ([Andersen and Henriksen, 2005]) and Norris and Lloyd ([Norris and Lloyd, 2006]), we found that theory testing papers represented a large portion of IT Governance Framework adoption research (59% of the 99 papers) with 31% having conducted field surveys and 28% case studies. Conceptual papers were also significant in that they represented 22% of the 99 papers. As our sampling frame, time period and focus differ from the literature reviews mentioned above, the present review complements and extends these earlier studies by providing a synthesis of the factors that enable or inhibit IT Governance Framework adoption and acceptance.

More specifically, the present paper identified four main categories of factors that influence IT Governance Framework adoption and acceptance, and one category of factors related to the consequences of IT Governance Framework adoption. The studies of the first category aim at identifying and measuring specific management strategies and actions that can influence IT Governance Framework adoption and acceptance. The most significant factors identified within this category include top management/political support and the use of a clear and well-executed process reengineering strategy. The second category includes research aimed at identifying specific organizational or individual characteristics affecting IT Governance Framework adoption and acceptance.

Within this research stream, process integration, political issues, financial resources, size,perceived usefulness and trust were found to be the most significant antecedents. The studies in the third category focused on examining how cultural differences affected IT Governance Framework acceptance (and finding that the existence of governmental sub-cultures resulted in different motivations and patterns of adoption). The fourth category of research investigated the influence of IT design characteristics on IT Governance Framework adoption and acceptance, identifying perceived security, privacy, accessibility, usability and confidentiality as the most significant antecedents. Finally, the fifth category of studies focused on the assessment of the consequences of IT Governance Framework adoption and acceptance, generally finding that the measurement of adoption outcomes was tightly linked with the extent of process reengineering induced by IT Governance Framework implementation, as well as with the type of measures used to assess the benefits of IT Governance Framework adoption (i.e., hard vs. soft measures; outcome-based, service specific, agency specific measures).

Several researchers have pointed out that the complex interdependencies and interactions that exist between organizational, managerial, technical, political and individual factors are key to understanding IT Governance Framework adoption and acceptance ([Andersen and Henriksen, 2005]; [Dawes et al.,]; [Gasco, 2003]; [Grönlund, 2005b]; [Kraemer and Leslie King, 2003]; [Pardo and Scholl, 2002]; [Roy, 2005]; [Scholl, 2005]). However, in the articles that were identified, none were found to conceptualize the multi-dimensional and multi-level nature of IT Governance Framework adoption and acceptance or to systematically theorize and measure these interactions and complex relationships. As many empirical studies have been based on strict replications of established frameworks related to the IS literature (eg. TAM, or UTAUT models with extensions such as trust or self-efficay etc.), or to the change management literature (eg. BPR models and maturity stage models), their explanatory power remains limited, In particular, past IT Governance Framework adoption and acceptance research has not been able to explain the significant discrepancies in the levels of adoption and effective usage that have been observed among public agencies ([Andersen and Henriksen, 2006], [Grönlund, 2005b], [Norris, 2005]).

In order to overcome the limitations of past approaches, we recommend that an IT Governance Framework adoption and acceptance model not only identify the factors that influence the net-enablement of public administrations,

but conceptualize the interdependencies and non-linear relationships that exist between these factors as well. We also believe that a framework that combines Dynamic Capability Theory (DCT) ([Eisenhardt and Martin, 2000]; Nelson and Winter, 1982; Pentland and Rueter, 1994; [Teece et al., 1997]) and the Theory of Complementarities (TC) ([Barua et al., 1996]; [Levina and Ross, 2003]; [Milgrom and Roberts, 1995a]; [Milgrom and Roberts, 1995b]; [Samuelson, 1974], [Whittington and Pettigrew, 2003]) can provide a useful starting point for that purpose. First, DCT may help fully conceptualize and take into account the overlooked implications of the net-enabled customer focus of actual IT Governance Framework initiatives ([Ho, 2002]). Net-enablement refers to an organization's ability to electronically "execute transactions, rapidly exchange information, and innovate at an unprecedented pace" by means of digital networks ([Wheeler, 2002]). For governments, netenablement entails significant changes to their structure and processes, as it calls them to "ask a new set of questions, to draw on new technical and commercial skills, and to employ new problem solving approaches" [Henderson and Clark, 1990]), also requiring them to execute "timely and ongoing reconfiguration of firm resources" ([Wheeler, 2002]) and capabilities. Capability reconfiguration is particularly relevant in this context since bureaucratic routines and processes have been documented to be the main source of structural inertia within public administrations ([Hannan et al., 1984]; [Perrow, 1986]). However, while routines may indeed represent an important source of organizational rigidity (Leonard-Barton, 1992), they have also been shown to be a major source of "flexibility and change" ([Feldman and Pentland, 2003]). Organizational routines have in effect been shown to be both a key determinant of organizational behavior ([Becker et al., 2006]), and a "major source of the reliability and speed of organizational performance" ([Cohen and Bacdayan, 1994]). Therefore, understanding the mechanisms by which actual bureaucratic routines and capabilities are modified and reconfigured to produce new net-enabled delivery service competencies could provide key insights regarding the process of IT Governance Framework acceptance, effective usage and performance.

Second, because organizational capabilities are likely to be formed by complementary factors ([Tranfield et al., 2000]), the Theory of complementarities can also provide a useful approach for conceptualizing and measuring their complex relationships ([Barua et al., 1996]). In the context of IT Governance Framework adoption and acceptance, a research model that is based on the concept of complementarities could be useful for three reasons:

1. It is likely to provide a means to capture the continuous and contextual character of IT Governance Framework acceptance and the need for its apprehension as a process (Categories 1 and 5);

2.]It can help highlight the role of managers and strategic leadership in IT Governance Framework adoption (Categories 1 and 2); and

3. It can allow the capturing of the "interaction effects" that are likely to exist between various complementary (or substitutive) factors that influence IT Governance Framework adoption and acceptance (Categories 1, 2, 3, 4).

The concept of complementarities can also allow researchers to take into account the complexity of integrating business processes in the public sector by more specifically identifying key integration enabling or inhibiting factors and their relationships ([Barki and Pinsonneault, 2005]).

In summary, our review of prior research related to IT Governance Framework adoption and acceptance points to considerable diversity in the topics, constructs and relationships considered by different studies. While the present paper has identified and categorized the key antecedents of IT Governance Framework adoption and acceptance investigated in past research, much work remains to be done. In particular, given the multi-level nature and scope of IT Governance Framework adoption and acceptance, future research is needed to investigate the influence of different stakeholders (internal and external constituencies) ([Grönlund, 2005b]) on IT Governance Framework design, adoption and acceptance, the mechanisms that enable integrations of a complex nature ([Barki and Pinsonneault, 2005]), and the interaction effects that exist between different antecedents of IT Governance Framework adoption and acceptance.

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Foreign Student Approval Worfklow System for Ministry of Education

Andreas Hadiyono
Universitas Gunadarma
mara@staff.gunadarma.ac.id

Farhat
Universitas Gunadarma
farhat@staff.gunadarma.ac.id

Albertus Bayu Adji
Universitas Gunadarma

bayuaji@staff.gunadarma.ac.id

Purwanto Subroto
Kepala Subdirektorat Kerja Sama
Antar Lembaga

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Ontology Based Batik Image Retrieval for Domain Knowledge

Fikri Budiman
Dian Nuswantoro University
Semarang, Central Java, Indonesia
fikri.budiman@dsn.dinus.ac.id

Abstract

Batik from Indonesia has been acknowledged by UNESCO as an Intangible Cultural Heritage of Humanity, recognized in the manufacturing process which is known as Wax-resist Dyeing hereditary. Diversity motifs and vibrant colors that have meaning philosophy of life into knowledge that needs to be introduced. With the progression of internet technology, the web has a number of data batik is very large, it is necessary for ontology in creating domain knowledge of batik. Ontologies are used to improve Content Based Batik Image Retrieval (CBBIR) system performance in overcoming the problems of semantic gap. This research aims to build a model of ontology that represent low-level differences in color, texture, and shape batik features with high-level concepts as batik understandable by users. Testing the success of the model is done by calculating the similarity, precision and recall on the success of batik image recognition

Keywords :Ontology, Semantic Gap, Batik Image Retrieval, Knowledge

1 Introduction

Batik is Indonesia's cultural heritage that has been recognized by UNESCO through the international world since October 2, 2009 as "Reperesentatif List of The Intangible Cultural Heritage of Humanity". In this regard, UNESCO recognized and distinguished with batiks from other countries is the technical process of making a unique use of closing wax with a "canting" and "cap", or what is known as the wax-resist dyieng, as well as generating pattern motif in the form of cultural symbol that has meaning to the philosophy of life and identity of the people of Indonesia.

Previous research authors to introduce more diversity motifs of batik, namely in the form of "e-supermuseum batik Indonesia" ([Budiman et al., 2012]), designed a model merging the functions of the e-museum with the e-marketplace. In the e-supermuseum still use relational database, less storage model is dynamic and there is a lack of knowledge in terms of storage with batik motifs that are interrelated. Problems relational database of semantic web technologies which have amounts of data very large batik, required data model based ontology as metadata that contains domain management knowledge to be able to process and understand information diversity motifs of batik. Existing knowledge is used to understand in recognizing motifs of batik image retrieval based content. Thus the model development Ontology can overcome the semantic gap in understanding the meaning of the keywords that exist on the motifs of batik, so as to facilitate machine in understanding the information to improve services for users. In this ontology is needed for solving semantic gap, i.e. the gap between visual meaning low level feature with textual meaning high level feature ([R.I. and Thyagharajan, 2014];[Manzoor and Balubaid, 2015]) Ontology Base Batik Image Retrieval (OBBIR) tried to low level batik image mapping feature to a hig level ontology concept, using a domain specific ontology for image capture relevant batik as expected users.

This research is the development of a Content-Based Image Retrieval Batik (CBBIR) that can solve the problems of semantic gap. Some previous research conducted for pattern recognition motifs of the original batik Indonesia ([Rangkuti et al., 2014];[Putra et al., 2011];[Moertini et al., 20 Introduction motifs of batik done to show identification of the origin of batik ([Rangkuti et al., 2014]) and the uniqueness of the texture and shape of his motives, so that matching can be performed to identify the origin of the image of the target with a characteristic in the dataset of images. On such research ([Rangkuti et al., 2014]) in analyzing the texture character used wavelet transform daubechies type

2 methods and invariant moment. On the research of ([Moertini et al., 2005]), use some algorithm to preserve to know a good algorithm for performen cluster and classification of batik is based on color, contrast, and the motive for the compatibility of consumer personal appearance of batik. The use of wavelet is also done on the research ([Putra et al., 2011]), batik pattern for extraction using wavelet transform with a combination of discrete wavelet transform and rotate wavelet filter.

CBBIR on the semantic web with storage of images that are very much with the difference in the name field will occur simantic gap, so that there is taking against irrelevant images and information is missing from the picture is relevant ([Ashwini and Leena, 2012]). To minimize the semantic gap in the search mechanisms, the necessary knowledge base to understand content, i.e. by way of creating a domain ontology using topological relations interrelated knowledge in applying the introduction to motifs of batik. Areas of research that will be done is address the image retrieval in overcoming a semantic gap, i.e. with domain knowledge building as batik knowlede based, ontology provides domain knowledge required by the approach of combination between the meanings of the visual or textual as high level feature as users know with low level fiture contain content owned by pictures, so the machine can visualize batik picture as human beings do.

As far as researchers know in previous studies ([Nasir et al., 2010, Nasir et al., 2011]) the ontologies used for image recognition of batik as TMT-metadata based. In the research conducted at the ontology mapping Traditional Malay Textile (TMT) with Committee Intenational for Documentation (CIDOC)-Conceptial Reference Model (CRM) which is an ontology for cultural heritage information exchange and community museum. The weakness of use text based metadata in recognizing images ([Ashwini and Leena, 2012]) because there is a difficult picture to be described with words, and to get the correct query, the user must know the full knowledge domain. To overcome the problem can take advantage of with-based content by utilizing the technology of image processing, namely with batik motif searches based on similarity of textures and content information that has meaning and origin of the knowledge area motifs of batik.

The problem will be solved in this study are: How the development of segmentation and feature extraction model which can be used appropriately to produce a query by batik image content in products contain datasets which contain low level feature characteristic of the texture, shape, and color as the differentiating characteristic pattern motifs of batik. And How the development of domain knowledge in the form of high level ontology concept model by mapping low level image features to improve the results of penyepadanan classification in the introduction of the batik image datasets.

The success of applying ontology can be minimize got irrelevant image information (high precision) and can guarantee a relevant image information is not overlooked (high recall). To calculate the similarity, precision and recall on the success of the introduction of content based batik image retrieval with ontology using a weighted Directed Acyclic Graph (wDAG) schema (R Sarno et al.,2011;D Pramono, 2013).

2 Batik Pattern Recognition

Batik of Indonesia recognized UNESCO instead of objects sold, but in the process of making a unique, manually performed hereditary by using the tool “cap”/”canting” and known as the Wax-resist Dyeing ([Budiman et al., 2012]). Indonesia is rich in motifs so that the required knowledge to introduce the motif based on the region of origin for the identification of the origin of batik([Rangkuti and Abdul, 2014]). The research of digital image pattern recognition on batik as traditional cloth from Indonesia that existed until now is to develop an algorithm to recognize the unique feature as a characteristic motifs of batik ([Rangkuti et al., 2014]; [Putra et al., 2011];[Moertini et al., 2005]).

CBBIR is an area of research that focus on image processing to be able to identify the features of diversity of batik motif. Introduction the motif is carried out by the research on the development of algorithms to be able to improve the introduction of the unique characteristics of each motifs of batik. Feature extraction stage was done to recognize and measure the characteristics of texture-based content, i.e. the combined approach of image data motifs of batik : the texture, color, and shape. Feature of Batik is a unique characteristic of batik picture object. So that the required processes of feature extraction to be able to distinguish or identify each motifs of batik. In the feature extraction of acquired characteristics of the object that has the power to be a differentiator for dataset and used in pattern recognition training ([Budiman, 2015]).

Introduction to batik relies heavily on the quality of the extraction of features, to get the dataset that contains the content characteristics motif or pattern of batik pictures, a good degree of accuracy is required. It is very influential in getting the results of the texture analysis for the introduction of the quality motifs. The features are characteristic traits of the unique texture of the image, which is used to be able to recognize the image through digital image processing. Feature extraction is performed to find the area of a typical feature in the image, the region can be distinguished

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on the basis of color, shape, and texture. Hallmark features is translated in the form of statistics in the form of the value of the standard deviation, mean, correlation, contrast, energy, entropy, and homogeneity. In producing the statistical value is the unique characterisitics of a few research method using wavelet transform, introduction to batik motifs ([Rangkuti et al., 2014]; [Putra et al., 2011]; [Imanuddin, 2010]; [Moertini et al., 2005]). The method of wavelet transform according to the feature extraction using signals or data that a-periodic, intermittent, noisy, and transient ([Budiman, 2015]). The transformation of the wevelet analysis done with the time on different frequencies of the STFT (Short-Time Fourier Transform), and is developing a family of functions generated by the wavelet base y (x) is called the mother wavelet and then into a wide range of wavelet transform based method for simplicity in analyzing data on feature extraction process.

A good extraction results will largely determine the success of the classification in pattern recognition. Image classification algorithm has also become the realm of research in fixing the percentage increase in the introduction of the batik motifs based on the dataset generated from the features extraction process. Classification algorithms into the realm of research is the development of soft-computing : fuzzy logic, neural network, and genetic algorithms.

3 Ontology-CBBIR

The Web has a large amount of data, to be able to understand and make decisions about the required semantic web. The essence of the semantic web technologies are applied for the representation of information becomes onthology forms knowledge base that can be understood and processed by machines. ([Ashwini and Leena, 2012]). Ontology change views toward document-oriented knowledge related in the domain of knowledge, and can be used in knowledge management system, because ontology contains the related knowledge. Ontology-based data model is used to store a database of knowledge. In an attempt to resolve the gaps of understanding the meaning of the key then done designing ontology for storing information and become a good basis for building a semantic function, so that the machine can facilitate ontology to process and understand information so that it is able to improve services for users.

Image Retrieval is the calculation of similarity in the image, on the image search CBBIR batik similar based on color, texture, side edges of the image, and based on the shape of the motifs ([Rangkuti et al., 2014]). To improve efficiency and user friendly CBBIR performance on the semantic web is to build a search mechanism that can be minimized got irrelevant image information (high precision) and can guarantee a relevant image information is not overlooked (high recall).

The result of CBBIR can be improved as in Ashwini, i.e. research with storage indexing image on semantic by creating meaning based index structure by using concept-based model with a dependent domain ontology ([Ashwini and Leena, 2012]). In this dissertation done development model with topological relation ontology which supports analysis of texture patterns of hybrid information through color, form, and texture, with the approach of the content features characteristic parameters of statistics.

Domain Knowledge motifs of batik can be built Ontology using Protege OWL (Ontology Web Language) or RDF Resource Description Framework) format. In defining a hierarchy of domain ontology concept/class using the RDF Schema, RDF is used to describe the image metadata storage in accordance with the ontology, and to query the class on the protege is supported with SPARQL. Ontology with information from the hybrid object that exists at the image of batik can facilitate CBBIR in enhancing the recognition of batik making imagery on semantics web. That can be the object of research here is data source Ontology, command ontology, and the user-view ontology (user mapping-view with command onthology, and mapping command onthology with local schema data source onthology).

4 Purpose System

This research was developed to achieve the CBBIR efficiency and user friendly on the semantic web. Ontology to improve CBBIR with classifying batik knowledge components specifically in accordance with what is required of the user, it is done by constructing the comprehensible symbols of the human form can be processed by the engine, thus the ontology being the liaison between humans and machines. This research area will generate a search mechanism that can minimize irrelevant information (high precision) and ensure relevant information is not overlooked (high recall). On the initial steps required to define hierarchy and the concept of domain knowledge specifically of batik correctly, as this effect on the results of the classification. Then proceed to map out low level image features to high level ontology concept, using a domain specific ontology of knowledge which can be used for image capture is relevant in accordance with the request of the user.

Ontology models developed using domain knowledge in the form of topological relation connectedness information content in the objects found in the batik motifs based on knowledge of the meaning and origin of the regions. In the im-

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age there are various combinations of batik object (the domain ontology), which needs describing relationships between objects in the information content to be presented more the image of batik motif. Domain knowledge batik constructed in accordance with human visual perception and knowledge about batik motif. The domain is a combination concept containing the class from batik motifs and objects which are the characteristics of each of the batik motif. On every object has a data property in the form of low level feature which is the result of a content feature extraction of batik motif.

In building a mapping between the low level features and high level concept can use Description Logic (DL). In this case the DL used to describe relations between the image featured in the ontology. Implementation of Domain Knowledge Ontology using DAML + OIL (DARPA Markup Language + Ontology Interface Language) which is already present in OWL. RDFs (RDF-Schema) is used in defining a hierarchy of domain ontology concept/class, objeck, and data properties. RDF is used to describe the processing image metadata storage in accordance with the ontology on the web, so it can be coded for, exchanged, shared and used. To query the domain knowledge supported by SPARQL.

5 Conclusion

From reference to previous studies can be said to address the problem of semantic gap on CBBIR process very precisely by building knowledge domain ontology for batik motifs based on the meaning and origin of the production area. Expectations from this research can generate a contribution in the field of semantic web technologies, namely the form of knowledge management systems motifs of batik from Indonesia based domain knowledge ontology.

To support the mechanism of search engines based on the introduction of of batik motifs based on content, the successful application of ontologies should be able to minimize to get information that is not a relevant image (high precision) and can ensure that relevant information is not lost image (high recall). To calculate the similarity, precision and recall on the success of image recognition batik motifs with ontology based on content that can use weighted Directed Acyclic Graph (wDAG) schema.

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Competency model for ICT workforce in Indonesia to prepare the Asean Economic Commuity

Eko Kuswardono Budiardjo
Universitas Indonesia
eko@cs.ui.ac.id.

I Made Wiryana
Universitas Gunadarma
mwiryana@staff.gunadarma.ac.id

Astie Dharmayantie
Universitas Gunadarma
astie@staff.gunadarma.ac.id

Adang Suhendra
Universitas Gunadarma
adang@staff.gunadarma.ac.id

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Big Data Analysis of Accounts Subject Social Network Based on Topic Model for Online Business Product Information Visualization

Tata Sutabri
Student of Information Technology
Doctoral Program Gunadarma
University - Jakarta Indonesia
tata.sutabri@gmail.com

Abstract

The purpose of the online business product visualization is to communicate information clearly and efficiently to the user through the selected graphic information, such as tables and graphs. Effective visualization helps users in analyzing and reasoning about the data and evidence. He makes complex data accessible, understandable and useful. The research methodology used in the analysis of data for visualization information of online business product, using the topic models. Topic modelling is a form of text mining, how to identify patterns in the corpus. You take your corpus and run it through a tool that a group of words in the corpus into a subject. The expected results of this paper is to help to present graphical information products online business simple for the user, in the form of graphs or tables, of the amount of data that is unstructured, and this information is required by the users or companies to compare information and decision-making processes.

Keywords :information visualisation, online business product, topic modelling

1 Introduction

At virtually all businesses and organizations, to develop big data analytics is a great challenge. This challenge is due to the large amount of data, data formats vary (either in structured or unstructured data) and come from all parts that exist in the organization as well as the various ways in which to combine, build and analyze data to get a pattern (pattern) hidden from data and information that is useful to the user. Big Data is a new technology in the world of information technology which enables processing, storage and analysis of data in various forms or formats, and gains a large amount of data very quickly. As background of the emergence of this term is a fact that indicates that data growth continues to multiply over time has exceeded the limits of storage media, as well as database systems available today. In addition it is also that simple graphical presentation of information for the user (user), in the form of graphs or tables, of the amount of data that is unstructured (unstructured), it is necessary to compare the process and decision making. The first challenge in developing big data analytics are How to break down the data in order to allow access to all of an organization's data is stored in different storage areas and even stored on different systems. The second great challenge is to create a platform that can attract unstructured data as easy as pulling structured data. Contributions from the analysis of big data account social network based on the topic of the model is to gather in and capture the data, then classifies (clustering) of data, then present graphical information products online business simple for the user, in the form of a graph or table, from the number of data that is unstructured, and this information is required by the users or companies to compare and decision-making process.

2 Review of Literature

According Dumbbell,2012. Big Data is data that exceeds the capacity of the existing database systems conventions. Data is too large and too fast or not in accordance with the structure of the existing database architecture. To get the value of the data, then it should choose alternative way to process it. Big Data analysis refers to the process of collecting, organizing and analyzing large collections of data to obtain patterns and useful information. Big Data analysis not only helps to understand the information contained in the data, but also helps to iden-

tify the most important data for business decisions today and the future. Big Data analysis basically wants to generate knowledge of the results of the data analysis. According to Friedman (2008), the main purpose of data visualization is to communicate information clearly and effectively in a graphical way. It does not mean the data visualization should look boring to function or extremely sophisticated to look attractive. To explain the idea effectively, shape aesthetic and functionality must simultaneously, providing insight for complex data sets and rarely by communicating key aspects in an intuitive way. Miriam Posner has described modelling topics, a method to locate and track large groups of words in the structure of the text. A topic model is, an algorithm that reveals hidden in the thematic structure of the document collection. Topic Model provides a simple way to analyze large volumes of text labelled.

3 Research Methods

Topic modelling is a form of text mining, how to identify patterns in the corpus. In machine learning and natural language processing, the topic model is a statistical model to find a kind of abstract "topic" that occurs in the collection of documents. Intuitively, given that the document is to have a particular topic, one would expect certain words appear in the document is more or less frequently. Output modelling this topic is not fully human readable. One way to understand what the program is telling you is through visualization, but make sure that you know how to understand what visualizations to you. Modelling tools wrong topic, and if the algorithm is not true, they can return some strange results. Visualization of data on two or three-dimensional structures have been created before the computer used to create the visualization. In his books Edward R. Tufte gives some examples of visualization techniques and have been used in a few years (Tufte, 1990). Visualization techniques developed, with techniques that have been expanded to process data sets in large numbers and display them interactively. There are techniques that are well known to the visualization of the data include:

a) Scatter plot matrices and co plots, b) Prosecution matrices, c) Parallel coordinates, d) Projection pursuit, as well as the techniques of projection geometric (ex. hyper box, hyper slide), techniques based icon, techniques hierarchy, techniques based graph, techniques of dynamic, techniques oriented pixel, and a combination of several techniques available. Other studies have also resulted in the exploration data and analytical system that implement some of the techniques that have been mentioned. One way to think about how the process works is to imagine a topic modelling work through an article with a set of highlighter. When you read this article, we use different colours for the key words from the theme of the paper when we find them. When it is finished, we can copy the words as grouped, with colours that we assigned them. List of words is the topic, and each colour represents a different topic.

4 The Research Plan and The Expected Results

In theory the preparation of the development of approaches is how to implement the strategies and methods appropriate to follow the steps of systematic development in order to obtain better results. The approach can be interpreted as a point of departure or the viewpoint of a person to a particular process. The term refers to the approach of views on the process that are still very common. Thus, the approach to the development of the theory point to the starting point or point of view in general about the process of development of the theory. Stages analysis of big data account social network based on the topic of the model is to gather in and capture the data, then classifies (clustering) of data, then present graphical information products online business simple for the user, in the form of a graph or table, from the number of data is unstructured. Test plan in the preparation of the topic models in outline, is the retrieval of data sets or raw data (in a format that is indeterminate) will be processed in a way that can be extracted and filtered into a form of data that can be analyzed (a process of abstraction of data) as the data in the structure tree, vector and metadata. This abstract data will then be mapped (process visualization of abstract data) in various representations such as graphs, Map and others. The stages of the testing plan are:

1. Data retrieval pdf format
2. Pre Processing -Filtering document -Parsing document
3. Preparation of topic models
4. Tests based on expert judgment
5. Making the data visualization

The expected results of the analysis of big data account social network based on the topic of the model is to present graphic information products online businesses in a group that is simple for the user, in the form of graphs or tables, of the amount of data that is unstructured, and information this is required by the user or the company to compare the information to the decision making process. Schedules and timing of research activities carried out within a few months ago until today, to analyze big

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data social network accounts such. The schedule of activities of the research that has been and is being done as this following.

Activity and Time	Year 1								Year 2				
	5	6	7	8	9	10	11	12	1	2	3	4	5
Collection of data	■	■	■										
Verification of data			■	■									
Klasification of data				■	■								
Analisys of data					■	■							
Making progress report							■	■					
Making final report								■	■	■			
Writing scientific papers	■	■	■	■	■	■	■	■	■	■			

5 Conclusion

Analysis of big data used in this paper is the use of data from social media, twitter, facebook, etc., combined with data from the company. The background of this paper is the emergence of a fact which shows that the growth of data continues to increase over time and has exceeded the limits of storage media, as well as database systems available today. Grouping data needs driven by the idea that geographic information from the data is important and necessary. The clustering of the data will provide an overview of patterns of communication in society. Often the result of processing the data is not able to be interpreted by the user as visualization models that are less communicative. This visualization is essential for subsequent decision-making, because it can be seen the pattern of the data that is being investigated whether positive or negative trending. As a limitation, in this study, the authors take the data on the social networking site face book with the topic of big data analysis of social network accounts to present graphical information for decision-making, from a face book account that contains the data of 5,000 data. Face book data, will be in the capture or grab, the method of topic modelling, then classified (clustering), after which it will be visualized in graphical form, based on existing data in the face book account, so that will be visible graphical information presented on the data actually is quickly and accurately using data clustering techniques.

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Strategy for Capacity Building of Digital First Responder for Law Enforcement Agencies

Koko Bachrudin
International Collaboration Office
Universitas Gunadarma
koko@staff.gunadarma.ac.id

Aidil Chenderamata
Information Seucrity Director
Kominfo
Ministy Communication in Information

Sutresna wati
Doctoral Program in Information Technology
tresna@staff.Gunadarma.ac.id

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Koko Bachrudin, Aidil Chenderamata, Sutresna Wati

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Sign Gestures Recognition for BISINDO and SIBI Alphabet using Morphology Algorithm based on Computer Vision

Dolly Indra
Faculty of Computer Science,
University of Moslem Indonesia
Doctoral Student in Gunadarma
University
dollyindra.08@gmail.com

Abstract

The system proposed in this research is sign language recognition system based on computer vision which in this study using several methods of data collection such as 1. Preprocessing, 2. Feature Extraction, 3. Classification, 4. Sign Recognition. The first stage, include several activities, i.e. Video Input, Convert to Frame, Filter Skin, Hand Segmentation. The second stage, In this stage, include activities, i.e. Centroid, Edge Detection, Smooth the contour. The Third stage, include activities i.e. Eigen Vector, Eigen Values and Euclidean distance. The final stage, where recognized gesture and then converted to text in form of BISINDO and SIBI alphabet.

Keywords :BISINDO, SIBI, Morphology

1 Introduction

Basically a sign language is the principal method of communication for the deaf people. In order to common people can communicate with the deaf so translator usually translate it into sign language. Main component that used in sign language is the use of hand and finger sign. While communication sign language used in there are two, namely Indonesian sign language (BISINDO) and Indonesian sign system (SIBI). Vision-based on automatic hand gesture recognition has many implementation for its application such as human-computer interaction, a sign language interpreter, remote control. One communications technology that can be applied is the image processing technology in sign language for candidates teachers for deaf students with or normal people in general with its main components, namely the use of hand and finger sign. This research aims to create a machine translator for dynamic sign language in which the machine is able to detect 26 gestures for each Indonesian sign language (BISINDO) dan Indonesian sign system (SIBI) that used for candidates teachers for deaf students or normal people in general using webcam and then the output is converted in text form.

2 Literature Review

2.1 Gesture

Wilson and Bobick [Wilson and Bobick, 1995] defines the movement as a gestures of the body that tend to communicate with other agents. Successfull communication if sender and receiver must have the same set of information for a particular gestures.

2.2 Sign Language

The term sign language is similar with term of language because there are a lot of them scattered throughout regions of world. Sign language was developed a long time and has evolved over a long time, have the grammar and vocabulary of sign language and therefore considerred as real language [Braem, 1995].

Lang et al [Lang and Raul, 2011a] sign language do not have sense of hearing that is required no sound required to produce it. It is common type of language among deaf people.

Nehemia and Febrilian [Sugianto and Samopa, 2015] deaf and speech impaired people in Indonesia communicate using sign language that refers to two systems namely, Indonesian Sign Language (BISINDO) and Indonesian Sign System (SIBI). BISINDO is developed by deaf people themselves through GERKATIN

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(Indonesian Deaf Welfare Movement) while SIBI is developed by normal people, not deaf people. SIBI equal to sign language that used in America, namely, ASL (American Sign Language).

Figure 1: BISINDO Alphabets

Figure 2: SIBI Alphabets that refers to the ASL

2.3 Morphology

Sianipar [Sianipar, 2013] Morphology is one of techniques in image processing that is based on shape of segment or region in the image. There are 4 morphological operators i.e. dilation, erosion, opening and closing.

2.4 Related Work

Some research related on sign language i.e. [Sawant, 2014], [Rajeshree S. Rokade, 2014], [DivyaS and S, 2014], [JoyettaSingha and Das, 2013], [Capilla, 2012], [Omkar and Monisha, 2011], [Lang and Raul, 2011a], [Iqbal and Purnomo, 2011], [Maraqa and Abu-Zaiter, 2008], [Kountchev et al., 2008], [Holden et al., 2005], [Bowden and Brady, 2004], [Sekar, 2001] while relating to gesture i.e. [Haitham Sabah Badi, 2014], [JoyettaSingha, 2013], [M, 2013], [Mokhar M Hasan, 2012], [Zhang and Wang, 2012], [Asriani and Susilawati, 2010], [Stergiopoulou and Papamarkos, 2009], [Nguyen et al., 2009], [Bailador and Troster, 2007], [Akmeliawati and Kuang, 2007], [Binh and Ejima, 2005], [Bowden and Brady, 2004].

3 Research Methodology

3.1 Proposed System

The proposed method in this research design which is shown in Figure 3 use several methods of data collection, i.e. 1. Preprocessing, 2. Feature Extraction, 3. Classification, 4. Sign Recognition.

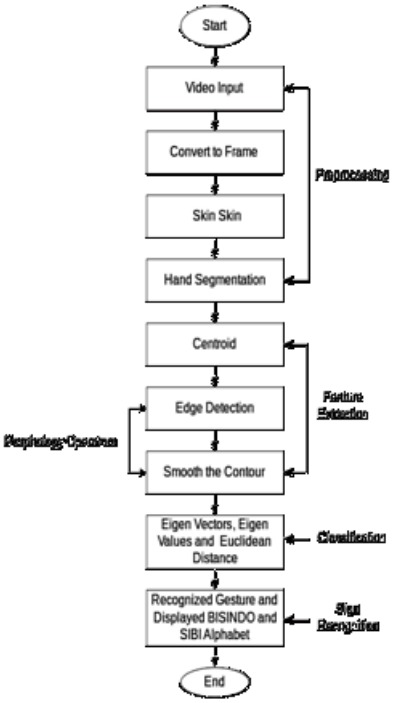

Figure 3: Proposed System

3.2 Prepocessing

In this stage, include several activities, i.e. Video Input, Convert to Frame, Filter Skin, Hand Segmentation.

- Video Input and Convert to Frame

  In this stage, image capturing is done by webcam, image captured in form of Red, Green and Blue image (RGB). Gestures captured with various scale, translasition and rotation and next performed convert to frame.

- Skin Filter

  In this step , performed to get region of colors skin pixels from background with using processing technique of colors, which is shown in

Figure 4. Step being taken in filtering of skin, i.e.

1. Image in form of RGB (Red, Green, Blue) converted to HSV colors space.
2. Filter Image is used to reduce noise in the image using average filter.
3. Perform image conversion to grayscale image.

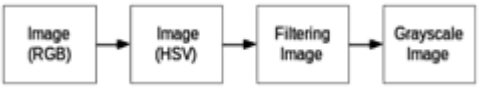

Figure 4: Skin Filter

- Hand Segmentation

  In this step, perform to separation hand with other part by the way of cutting image because will be done processing is part of hand. Later, perform to examination (scan) againts image from vertical and horizontal posisition to determine white pixels

3.3 Feature Extraction

In this stage, include activities, i.e. Centroid, Edge Detection, Smooth the Contour.

- Centroid

  In this step, calculate the centroid for partitioning the hand in to two parts one which represents the finger portion and other which represents non finger region. Centroid is calculated using image moment, which is the weighted average of pixels intensities of the image.

- Edge Detection

  In this step, Edge detection is used to perform separation between background with the object using morphology technique that is erosion operation.

- Smooth the Contour

  In this step, morphology operations used are opening and closing. These operations use to smooth the countours of the object and eliminate all pixels in an area that is too small to be occupied by the structural elements.

3.4 Classification

In this stage, include activities i.e. Eigen Vector, Eigen Values and Euclidean distance.

- Eigen Vectors

  In this step, it is used to detemine the angle of a hand gesture.

- Eigen Values and Euclidean distance

  In this step, Eigen Values weighted by Euclidean distance to find the image (hand sign) that tested with image in the database.

3.5 Sign Recognition

This is the final stage, where recognized gesture and then converted to text in form of BISINDO and SIBI alphabet

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Creative trhough Robot Building, a result of Incubator Bussines Centre in Univ. Gunadarma

Mara Nugraha
Universitas Gunadarma
mara@staff.gunadarma.ac.id

Ernianti Hasibuan
Universitas Gunadarma
ernianti@staff.gunadarma.ac.id

Mardi Gunawan
Universitas Gunadarma
mara@staff.gunadarma.ac.id

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Flora-Indonesia.id, A Citizen Science Approach for Biodiversity Informatics Portal

Kartika Dwintaputri Siregar
UG Biodiversity Informatics
Researcher
Gunadarma University
kartika_ds@staff.gunadarma.ac.id

I Made Wiryana
UG Biodiversity Informatics
Researcher
Gunadarma University
mwiryana@staff.gunadarma.ac.id

Teguh Triono
Biodiversity Scientist
KEHATI
teguhtriono06@gmail

Abstract

Indonesia is a primarily rural nation, with great dependence on plant resources. Plant checklists are very valuable for the wise management of Indonesia's plants at Provincial level, especially in this time of rapidly changing climate. The importance of biodiversity resources for national development is increasingly being recognized by policy makers throughout the World (note, e.g., the recent formation of the Intergovernmental Platform on Biodiversity and Ecosystem Services, IPBES). A biodiversity informatics portal flora-indonesia.id was developed with the citizen science approach, a collaborative scientific research involving the public in research.

Keywords : Biodiversity, Biodiversity Informatics, Citizen Science, Citizen Scientist

1 Introduction

Collecting biodiversity data is usually done by a professional scientist or researcher. However, the lack of time and funds for biodiversity data inventory became one of the constraints of obstruction of biodiversity informatics systems.

The importance of biodiversity resources for national development is increasingly being recognized by policy makers throughout the World (note, e.g., the recent formation of the Intergovernmental Platform on Biodiversity and Ecosystem Services, IPBES). Indonesia is a primarily rural nation, with great dependence on plant resources. Plant checklists are very valuable for the wise management of Indonesia's plants at Provincial level, especially in this time of rapidly changing climate.

With this PEER Project, we develop a comprehensive digital reference library, including many thousands of plant images, and internet resources and platforms to facilitate the accurate identification of plant species and the sharing of observations. West Kalimantan is choosen as focus because it has very high plant diversity.

The development of Provincial and National plant checklist through the participation of Citizen Science like parataxonomists is in-line with the national capacity building policy direction of Indonesia Biodiversity Strategic Action Plan, IBSAP. The inclusion of Citizen Science meets IBSAP implementation on improving the ability of communities in conducting sustainable and equitable management of biodiversity, including plants, based on local knowledge and wisdom. The key factors in enhancing the Citizen Science research ability and standard are dissemination of information, easy access to information sources, and application of simple and appropriate technology for documenting and monitoring biodiversity, at the levels of communities, the NGO and private sector; and the government at the local, regional, and national levels.

The scope of the research is to prepare and send out twelve teams of parataxonomists to locations around West Kalimantan. They collect plant observations (and specimens) that directly are integrated into a user-friendly online database. These data contributes significantly to a checklist of the plants of West Kalimantan.

2 Flora-Indonesia.id

Flora-Indonesia.id is a biodiversity portal that contains input biodiversity data system with citizen sci-

ence approach, digital repository, biodiversity social network and support to integrated to other system. Main features on the portal:

- **Input Biodiversity Data**

  This feature allows user to input biodiversity data. This feature is already implementing methods of citizen science, there are two ways of inputting data:

  1. **Batch Upload**, this method is intended for users who are more expert in biodiversity such as a researcher. This method uses a worksheet template, then the user can be an upload of photos and data at once. This feature allow users to input data in a single zip file system. This feature aims to facilitate users who want to upload large amounts of data and large.

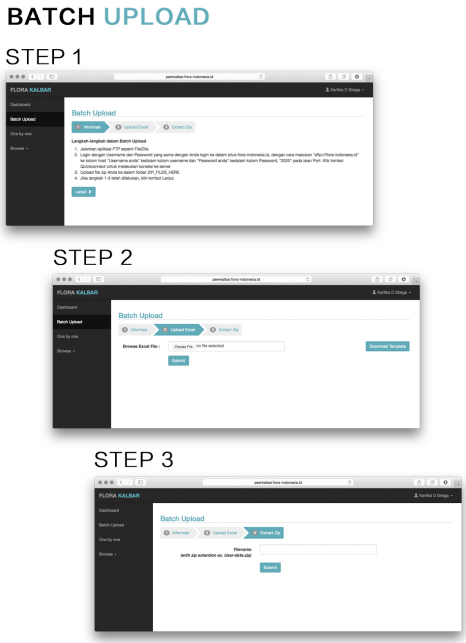

Figure 1: Batch Upload

  2. **One by One**, this method is intended for general users, data inputted one by one with the flow of the stages that have been provided to facilitate users who do not have knowledge of biodiversity. This feature has been designed according to the flow of metadata as well as on the Batch Upload feature that does not eliminate the importance of data uploaded

- **Browse Data**

  This feature allows user to browse any data that have been inputted from all users. This feature also has support for integrated with other systems. This feature has three options:

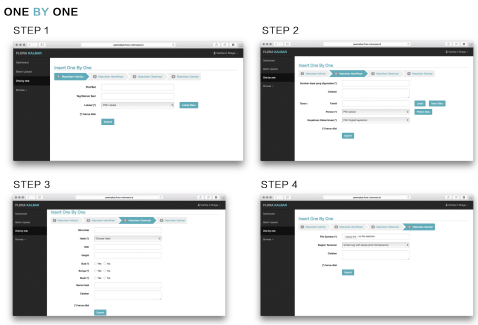

Figure 2: One By One

  1. **Data Taxa**, this option allows users to view and search for data based taxonnya (Family, Genus and Species).
  2. **Data Location**, this feature will display all locations in flora-indonesia.id. It aims to help users who want to find an individual plant that is in a particular location.
  3. **Data Person**, this option allows user to view and search the data by the person who input data into the application flora-indonesia.id.

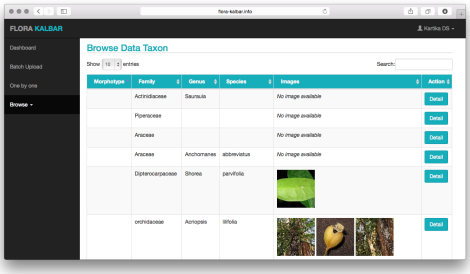

Figure 3: Browse Data

- **Digital Repository**

  This feature provides digital repository such as a guidance to use the portal, workshop material, and publication.

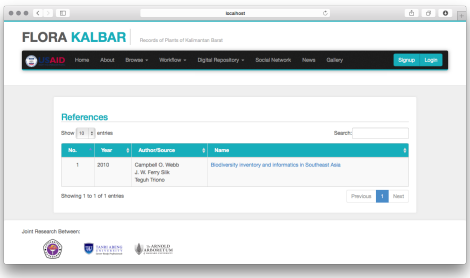

Figure 4: Digital Repository

These data contributes significantly to a checklist of the plants of West Kalimantan. This project executes several phase of actions:

1. Prepare a digital reference library for Bornean plants
2. Develop online resources to assist in plant identification.
3. Develop an online platform for sharing, integrating and discussing field observations. This application will be a general tool for collecting plant observation data for Indonesia.
4. Run a training course in Pontianak, West Kalimantan for twelve participants. They will be instructed on metadata collection, digital photography and in how to interact with the online data-sharing platform. This will also be an opportunity to share botanical knowledge and tips.
5. Encourage and fund these twelve participants to each take a 15-day field trip to different botanically critical sites in West Kalimantan
6. Assist with post-expedition plant identification and sharing
7. Integrate findings with existing plant lists to produce a preliminary checklist for the plants of West Kalimantan

Following the identification, the project portal has provided easy and fun to browse each collection images with direct access to the best resources (checklists, interactive keys, image collections) for identifying participants observed taxa. As observations have been uploaded and given determinations, the system has automatically incorporated these new data into a dynamically generated checklist, which accessible and downloadable in a number of formats. At this stage, the project basically introduced the importance of networking and sharing data in expedite the development of precise, accurate and valid plant checklist.

3 Citizen Science Approach

Citizen science is a form of collaborative scientific research involving the public in research. Citizen science is also associated with long-term program in observing natural resources voluntarily, and usually volunteers without a formal background [Wiggins and Crowston, 2012].

Citizen scientist are volunteers who participated in a field assistant on scientific research. Citizen scientist helps oversee wild animals and plants or other environmental markers, but they are not paid for such participation. Most of the citizen scientist are people who love the outdoors or are aware of the environmental crisis and wanted to do something with the issue. The volunteers usually do not analyze the data or to write scientific reports, but they prefer to gather information [Cohn, 2008].

The development of Provincial and National plant checklist through the participation of Citizen Science like parataxonomists is in-line with the national capacity building policy direction of Indonesia Biodiversity Strategic Action Plan, IBSAP. The inclusion of Citizen Science meets IBSAP implementation on improving the ability of communities in conducting sustainable and equitable management of biodiversity, including plants, based on local knowledge and wisdom. This implementation will be supported by providing easy access to accurate data and related information on the function and potential of biodiversity, its distribution and abundance. The key factors in enhancing the Citizen Science research ability and standard are dissemination of infor- mation, easy access to information sources, and application of simple and appropriate technology for documenting and monitoring biodiversity, at the levels of communities, the NGO and private sector; and the government at the local, regional, and national levels.

4 System Development

Flora-Indonesia.id is developed using Codekir framework built by Digital Bhayanaka and Trinata Technology. Codekir Framework is a framework with the concept of MVC (Model-View-Controller), has supported web service features, supports relational databases and non-relational, and and supports a responsive user interface design [Pulu, 2015].

5 Biodiversity data

This project has collected the biodiversity data :

- Number of individu: 1693, all identified to species level,
- Number of unique: 907 were unique, 786 identified as common (identified names similar to the unique samples but originated from different place).
- High quality pictures of plants, 52 Gigabytes of Pictures.

6 Data collection and identification problems

Based on the project activities conducted, various obstacles have been identified. Moreover, the condition of the field such as lack of network. Therefore we have to develop the system which can work without the internet connection, but it can submit

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automatically the data whenever they have internet connection. These problems led to project incomplete achievement of its outreach activities because all outreach activities especially the training required the completion of the developed system and database.

Data collection and identification problems:

- Incomplete metadata and photographs caused additional efforts and time for data clarification and resending image files.
- Lack or slow connection has also contributed to the delay of the data collection and integration processes. In many targeted areas for expedition have no network. Each group commonly delayed their data submittion until theymoved within the network range. We have to develop system which can work without the internet connection and submit automatically the data whenever internet connection is available.
- Data identification: data identification process has consumed more time than expected. This circumscription related to the speed of data submission and the quality of plant photograph as the main source for taxonomic identification.

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The 5th Uzbekistan - Indonesia International Joint Conference on Globalization, Economic Development and Nation Character Building to make the Global Economic Challenges is initiated by the cooperation between Universitas Gunadarma in Jakarta Indonesia and Branch of Russian Economic University after G.V. Plekhanov in Tashkent, Uzbekistan. The first joint international conference was organized in Jakarta 2011. The conference is annual event which is organized by the two universities alternately in Jakarta Indonesia and Tashkent Uzbekistan.

This conference is aimed at creating an academic-goverment-business/industry-community forumwith the following objectives:

- to promote research relevant to issues relating to globalization and its associated aspects;
- to encourage integration and exchange of knowledge among academics and professionals worldwide in micro and small business management, micro-finance, tourism industry, cooperative management, rural bank management, Islamic economic system, and business information management; and
- to develop frameworks for a better understanding of the roles of ICT-supported micro and small businesses, micro-finance, tourism, community development, and Islamic economic systems in economic and nation character development.

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