- 3. The Global Competitiveness Report 2009 -2010 http://www.weforum.org/documents/GCR09/index.html
- 4. The National Economy of Latvia: Macroeconomic Review/ Ministry of Economics, Republic of Latvia, June 2008, 151 p.
- 5. Innovation Scoreboard (EIS) 2009 -http://www.proinno-europe.eu/sites/default/files/page/10/03/I981-DG%20ENTR-Report%20EIS.pdf
- 6. The National Economy of Latvia: Macroeconomic Review/ Ministry of Economics, Republic of Latvia, December 2010, 148 p.
- 7. Cilvēkkapitāls un izglītība http://www.latvija2030.lv/upload/diskusijulapas_cilvekkapitals.pdf
- 8. CSB data base http://www.csb.gov.lv
- 9. Operacionālās programmas "cilvēkresursi un nodarbinātība" projekts http://dev.euronet.lv/izm/upload_file/Aktualitates/Info_tech/10p20060516projekts.pdf

SUMMARY

The article devoted to the problems of competitiveness of Latvia. The global competitiveness index has decreased during previous years. The main threats are stressed. General conclusion is that a way to competitiveness enhancement and to the knowledge-society lies via innovations. The government economic policy has to be changed.

Keywords: competitiveness, innovation potential, global competitiveness index, national economy. **PE3IOME**

У статті розглянуті та проаналізовані проблеми конкурентоспроможності економіки Латвії. Глобальний індекс конкурентоспроможності знижується протягом попередніх років. Був зроблений висновок, що єдиний шлях до рішення проблем - це розвиток інноваційного потенціалу, і економічна політика держави повинна бути істотно змінена.

Ключові слова: конкурентоспроможність, інноваційний потенціал, глобальний індекс конкурентоспроможності, національна економіка.

РЕЗЮМЕ

В статье рассмотрены и проанализированы проблемы конкурентоспособности экономики Латвии. Глобальный индекс конкурентоспособности понижается в течение предыдущих лет. Был сделан вывод, что единственный путь к решению проблем – это развитие инновационного потенциала, и экономическая политика государства должна быть существенно изменена.

Ключевые слова: конкурентоспособность, инновационный потенциал, глобальный индекс конкурентоспособности, национальная экономика.

PROSPECTS FOR THE DEVELOPMENT OF INNOVATIVE ENTREPRENEURSHIP IN GEORGIA

Shaburishvili Sh., PhD in Economics Associate Professor Faculty of Economics and Business, I. Javakhishvili Tbilisi State University

Under conditions of globalization based on technical revolution widespread technological changes eliminate traditional differences between low and high technological branches and shift the general vector of development from static, temporary comparative advantage to innovation based, dynamically changing competitive advantage. In other words long term upward trend in public welfare is impossible to imagine without innovations. Because of the above, since 2001 UN Development Program experts, except for the Human Development Index, have been defining Technological Development Index for every country.

One could find many definitions of innovations in the modern economic literature. Innovation is technological, technical and managerial novelty based on scientific advances and experience, as well as the latest and materialized idea recognized in the market. In a broader sense it is the outcome of ideas, experiments and research transformation, new or improved researched or social - economic results designed for practical use. The essential characteristic of innovation is novelty, ability to satisfy market demand and commercial viability.

From the novelty viewpoint, innovations include:

- New or improved goods;
- New or improved technological process;

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- New forms of managing production, trade, financial or any other activities.

From market demand satisfaction viewpoint, innovations can be:

- Evolutionary. It manifests itself in modification of an existing product and is created in response to the familiar market needs. However, it is considered to be the best way of satisfying demand.

- Revolutionary, directed to satisfying demand, originated simultaneously with a novelty. Innovations of this kind are rarely and unexpectedly born. Actually, they create new market.

Comparison of revenues and costs is the basic criteria of realization of any new idea. Technical novelty can not be regarded as innovation unless it brings an economic effect in terms of profit, reduction of production costs, improvements in productivity, etc.

Development of competitive, innovation based production can be enhanced by means of technological advances and modernization of production base. In this context, the branches of "new economy" should be emphasized, such as aerospace, pharmaceutical, radio, television and communication technique, computer, exact medical and optical equipments. Traditionally, companies of highly developed countries – USA, Japan, Great Britain, Germany, France – dominate the market of advanced technologies. New Industrial Countries of South East Asia Hong Kong, Malaysia, Taiwan, Singapore and South Korea are their important Competitor in several segments of the world market.

In the age of globalization the fate and future of a country and its competitiveness in the market depends on its ability to be included into the new innovation contours of the world economy. Besides production of scientific knowledge and technological know-how increasingly depends on research conducted in the framework joint projects. The documents of OECD indicate that countries' participation in research and development internationalization processes is influenced by the following factors:

- Size of the country (small countries have more internationalized R&D sector);
- Level of technology saturation;
- Geographical closeness to the active R&D regions;
- Industrial specialization;
- Nature of foreign subsidiaries, etc.

Contemporary innovation processes are characterized by essential changes in the role of science. Now science is not only the source of innovative ideas but also the penetrating resource all of the steps of innovation process. Innovation process has assumed systemic, complex character. It resulted in a qualitatively new method of scientific production. The principal characteristic of it is knowledge production within the context of its use, interdisciplinarity, heterogeneity and organizational diversification, increase in social responsibility, quality control system based on broader principles.

Revolutionary changes caused by new technologies transform conscience. The technologies themselves which took the name high hume instead of high tech became the most profitable business. This resulted in the development of high technological sector of the world economy. Spending on research and development is increasing.

The accepted wisdom is that innovators entirely depend on "good luck" in their innovative activities, because the chances of complete loss and huge success are almost equal while implementing innovations. The economists Chan Kimm and Rene Mauborne have studied the problem for ten years and explored 200 innovation implementation cases. In their work "Profitable Business Idea: they distinguish 3 essential economic prerequisites of commercially viable business idea. These prerequisites are integrated into "commercially viable business idea" index, which can be applied by innovators:

1. Benefit: whether new goods and services attract consumer;

2. Strategic calculation of prices: what price strategy is applied by a firm in order to attract mass consumers;

3. Business model: how profitably can a firm realize new idea? Are the innovators capable to accomplish certain tasks?

We can distinguish three main stages in innovators' foreign economic activities:

At the first stage companies export final products. That is the export of technological and other novelties in indirect way. Naturally, science intensive export requires huge investments in research and development. Despite this, it is regarded as the most profitable activity. Except for company's competitiveness, science and technological potential of home country, labor skills, employment and national income, as a whole, increases.

At the second stage companies start producing innovative products via FDI. It enables innovator to save transport costs, use cheap foreign labor, materials and seize new segment of foreign market. It is useful

for the recipient too, because FDI are additional source of income, which helps to accelerate technological progress of a country.

At the third stage technologies are sold abroad. AS a rule, technology has not a special innovative value for the exporter any more, although there are segments of the world market, where it still can bring some profit. For example, those technologies which are already obsolete in developed counties, may have considerable value from novelty viewpoint and be commercially viable abroad.

International marketing methods are needed to make full use of innovative products potential. When studying new idea or potential consumer of research results, one should take into consideration:

- Innovative priorities of a country;
- Experience of innovation implementation;
- Competitive position of a firm in local and international markets;
- Degree of interest in strategic partnership with an innovator.

Firms operating in high technology sectors attach a particular importance to the time needed to adapt consumer with the novelty. According to this parameter, the following segments can be distinguished:

1. Innovators (about 2,5% of the market) are ready to take risk and try goods first. Although their number is moderately small, they manage to persuade more passive consumers;

2. Early followers (13,5%) are first to imitate innovators and play the role of leaders, whose view is important for adaptation with new product markets;

3. Early majority (34%) are very careful to purchase new products and don't often take leaders' positions;

4. Late majority (34%) are skeptical about innovations and adapt novelties only under certain economic and social conditions.

When exporting innovative products companies should be focused on the first two segments, which are small in number, but make an important influence on formation consumer attitude towards the novelty. Positioning, pricing, distribution and stimulation strategies should respond the peculiarities of the very market segments.

Under global competition interfirm and intersectoral collaboration is a widespread means of increasing efficiency of innovative activities. Contacts between government, universities, industrial and science organizations are also intensified. The main forms of collaboration include science and technical parks, innovation centers, joint ventures, university scientific and technological centers, agreements on industrial and university research, research consortia. Powerful research and production complexes as a rule are created around universities. One of the best examples of it is the Silicon Valley in the USA, which was established at Stanford University. Its creation was determined by high technology industry. There are more than 4 thousand computer firms in Silicon Valley. 1/3 of USA rockets and air planes are produced there, 1/5 of world production of semiconductors, 1/6 of computers. The American corporations IBM, Intel, Japanese Sony, Taiwan Acer Corporation and other companies have research centers in Silicon Valley.

According to the research of English economist, Frieman (he investigated cooperation in R&D between the USA and Western European companies in the field of biotechnology's, information technologies and production of new materials), the main form of this cooperation were joint projects in R&D. This form involved the most part of the projects: 29,8% - biotechnologies, 27,6 % - information technologies, 25,1% - new materials. Other forms of cooperation include venture firms, research consortia, agreements on technical cooperation, foreign direct investments, agreements between consumers and suppliers, agreements on one-way technology flows.

Formation of new technological foundation of companies complicates "science-technology, production-consumption system", which, in its turn, adds new functional elements to the innovation process. Except for marketing, investment component has taken an important position in financing it. Financing the innovation process is a very acute problem. Attraction of investments to innovation projects is difficult because of their long-term character and absence of return at the first stage. There is also the risk that these investment will not provide any return at all. Private sector is the major source of financing R&D activities in Western countries. More than 70 % of research expenses are financed by the private sector in the highly developed countries. Government invests in education and fundamental research.

Venture capital has a special importance in financing innovations. That's why venture business is developing at fast rate, which includes financing new ideas, progressive scientific and technical elaborations and bringing them to the condition to be sold i.e. commercialization. As a result of development of venture business California formula of success has emerged: brain capital + venture capital (intellectual capital + venture capital).

Venture business has encouraged shift to the post industrial phase of development of the advanced countries. Venture financing has become the driving force of the economy of the USA. It guarantees promising future by the California receipt "high tech-high life-high risk" (high technologies, high living standard, high risk).

Venture firms find optimal paths for national business development and large scale investments. These are investments in science and technological advances, which in their turn increase the efficiency of national economies. Venture capitalists do not think in terms of categories of inventions, research and discoveries. They invest not in patents and projects, but in legal persons. Patents and projects are not so important. For venture capitalists the main unit is a company. They seek for such a technology, which can make a super star (which can be of world scale). They have to find not merely a greatly promising technology, but the technology with the best team. Technical as well as business ideas do not cost anything. The major task is their realization. That is possible when there are experienced managers and engineers.

Development of innovative entrepreneurship depend not only innovators' attempts, but also on the effectiveness of government policy. On the basis of developed countries' experience, we can distinguish the following directions of government participation in these process:

• Structural policy. It includes business environment for the innovators. Of course, it should aim at permanent improvement and expansion of the prospective innovation "greenhouse". It requires more various initiatives: technological, competitive policy, deregulation, tax relief, shares in large research projects, favorable terms for crediting innovative activities, providing land or other facilities to innovative companies and science organizations free of charge, infrastructure development.

• Intermediation (broker) policy. The state undertakes organization of meetings between science and business circles, governmental agencies. That helps to make close contacts and strategic partnership.

• Pretentious consumer policy. The state sets high standards for quality of goods and services, technologies or technological process that makes firms elaborate and implement novelties.

Thus, two level system of factors define the prospects for the development of innovative entrepreneurship. The first level encompasses those strategies and methods, which are applied by the firms to reach and maintain competitiveness in the world market. At the second level government is a decisive factor, which provides direct or indirect support for local innovative firms.

Unfortunately, Georgia's export and economy structure in which agricultural products, raw materials (gold, copper), etc, makes draw two unfavorable conclusions:

1. Innovative activities of Georgian firms is low. That impedes to reach and maintain international competitiveness;

2. Georgian model of economic development does not correspond with and is not even similar to that of developed countries. Georgia does not hold not a single niche in the world market of innovative products.

Despite this, shift to the innovative model of development is of vital importance. Rivalry of Georgian firms with the firms of developed and some developing countries has no prospects.

Georgia is rich in intellectual capital. Accordingly, Georgia possesses the most significant resource for economic development and its rational use will provide considerable growth. It is necessary to realize that the long-term development vector of the country must be determined by human capital. Georgia needs national policy, which will lead to formation of a powerful innovative sector. Our country will be able to take its worthy position in global division of labor by means of the very sector.

Georgia has considerable advantages and opportunities to shift the new model of development:

- Universal secondary education system;
- Developed (reformed) higher education system;
- A large network of research institutions;
- Internationally recognized scientists;
- Cheap and high skilled labor;
- Liberal trade regime;
- Favorable investment climate
- Opportunities of formation free industrial zones;
- Favorable geographical location;
- Membership in international organizations;
- Participation in international projects.

The main weaknesses and threats for Georgia's innovative development are:

- Low technological level of production facilities;
- Lack of financial resources for modernization and renovations;

- Low quality of management;
- Imperfect institutional and legal mechanisms for stimulation of innovative activities;
- Deformation of industrial structure;
- Weak orientation on quality improvements;
- Threat of political instability, lost territories;
- Economic sanction on the part of trade partners.

The experience of some developed and developing countries (China, India, Vietnam, countries of Central and astern Europe) shows that attraction of FDI accelerates innovative processes. Production system modernization by means of foreign resources enabled these countries to reach foreign markets and take certain niches there. Entry of transnational corporations encourages innovative development: subsidiaries are established not only to produce goods and services, but also have research function. After the Revolution of Roses there was a considerable shift in FDI attraction in Georgia. The success is due to the investment climate improvement measures taken by the Georgian government, including:

• Tax reform. By the new Tax Code adopted taxation rates and taxes were reduced.

• Liberalization of foreign trade. Customs procedures were facilitated, customs tax rates were reduced, import of long-term assets is imposed by zero duty, that stimulates foreign trade and especially trade in high tech products.

• Facilitation of company registration procedures. Changes in the Georgian Law on Entrepreneurs limit registration dates and eliminate various bureaucratic impediments that make Georgian business more attractive.

• Facilitation of licensing, leaves and labor regulation. Georgia has one of the liberal legislation in this field.

• Free industrial zones should play an important part of attraction of high tech FDI.

Although, it should also be noted, that only technological novelties accompanying FDI are not sufficient to form sustainable innovative sector. It requires innovative potential evaluation. Scientific elaborations and inventions should be brought to "market conditions". It also requires search for novelties and stimulation of demand for them, establishment of innovative firms and governmental support for their access to the foreign markets, development of venture business. At leading universities of the country (Iv. Javakhishvili Tbilisi State University, above all) it is reasonable to establish business incubators, technical parks, which will turn into the prototypes of venture firms. The venture principle of innovation development gives opportunity to filter the novelties, provides market evaluation of scientific ideas and applied research outcomes in case of emergence of economic demand.

REFERENCES:

- 1. Портер М., Конкуренция, М., 2001.
- 2. Внешнеэкономическая деятельность предприятия. Под редакцией Л.Е. Стровского. М.: ЮНИТИ, 2007.
- 3. Б. Хилл., Д. Пауэр., Бизнес-ангелы, М. «Эксмо» 2008.
- 4. X. Нойбауерт, Инновационная деятельность на малых и средних предприятиях, <u>http://www.cfin.ru/management/strategy/smallbiz_inno.shtml</u>
- 5. International Business, The Challenge of Global competition, Ball, McCulloch, Geringer, Minor, McNett, 11-th ed. 2008.
- 6. Sh. Shaburishvili, Georgia's Innovative Development Prospects Under Conditions of Globalization, mag. Sakartvelos Ekonomika N4 (125), 2008.

SUMMARY

In the age of globalization the fate and future of a country and its competitiveness in the market depends on its ability to be included into the new innovation contours of the world economy. Two level system of factors define the prospects for the development of innovative entrepreneurship. The first level encompasses those strategies and methods, which are applied by the firms to reach and maintain competitiveness in the world market. At the second level government is a decisive factor, which provides direct or indirect support for local innovative firms. **Keywords:** innovation economy, competitiveness, innovative entrepreneurship, development.

резюме

В эпоху глобализации будущее страны и ее конкурентоспособность на рынке зависит от ее способности включиться в контуры новой инновационной экономики. Перспективы развития инновационного предпринимательства определяют два уровня системы факторов. Первый уровень включает такие стратегии и методы, которые применяются фирмами для достижения и поддержания конкурентоспособности на мировом рынке. На втором уровне решающим фактором является государство, который прямой или косвенной поддержкой обеспечивает местные инновационные фирмы.

Ключевые слова: инновационная экономика, конкурентоспособность, инновационное предпринимательство, развитие.

РЕЗЮМЕ

В епоху глобалізації майбутнє країни та її конкурентоспроможність на ринку залежить від її здатності ввімкнутися в контури нової інноваційної економіки. Перспективи розвитку інноваційного підприємництва визначають два рівні системи факторів. Перший рівень включає такі стратегії та методи, які застосовуються фірмами для досягнення та підтримки конкурентоспроможності на світовому ринку. На другому рівні вирішальним фактором є держава, що прямою або непрямою підтримкою забезпечує місцеві інноваційні фірми.

Ключові слова: інноваційна економіка, конкурентоспроможність, інноваційне підприємництво, розвиток.