Economics of Azerbaijan: upgrading and implementation of effective instruments

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Abstract. The topical issues of economics of Azerbaijan Republic, in particular the upgrading issues and importance of implementation of the up to date economic instruments in the economic system of the country are investigated in the article. There are also analyzed and validated the necessity of acceleration of the innovation of the economics in Azerbaijan, acquisition of the innovation activity, creation of network of the competitive enterprises, additional motivation in getting hold of large capital into the country from outside and attraction of investors to the oil sector, the activation of implementation of the new economic manners in the economic system of the country including the creation and functioning of the special economic zones.

Keywords: Azerbaijan, macroeconomics, economics system, innovation, competitiveness, special economic zones, technology park.

Introduction

For the period of 1991-2013, in the years of independence, Azerbaijan had to overcome the hard path of the economic development and made historical progress. The country takes the lead as the main participant of the large regional energy and transport projects. Azerbaijan is one of the important partners of European Union in the issues of security of energy supply. During the last 10 years the competitiveness of the economics of Azerbaijan has boosted. In accordance with this relative the country runs ahead of all the CIS countries and it is aimed at innovation of its national economics.

However, the process of the innovation of economics in Azerbaijan demands to solve many problems, especially it makes economic sense to include the more productive and effective economic manners to the economic system [1].

In world practice there is a number of the effective economic instruments one of which are special economic zones (SEZ) with the aim of reinforcement of activization of the economic processes and innovation of the national economies. Many countries of the world rationally use the implementation of SEZs for the acceleration of the economic growth, the reinforcement of the business activity, implementation of innovation functions in the real sectors of the national economics [2; 3]. Last years the technology parks have been already functioning in Azerbaijan. These technology parks include the modern equipment and technologic processing line. In April 2009, the Law about ‘Creation of Special Economic Zones in Azerbaijan Republic’ was adopted, the necessary legal acts, rules and mode of creation and functioning of SEZs were developed and approved.

The world experience is explored and the priority models of SEZs to include in the economic system of Azerbaijan were defined. Alongside with this there are the practical issues and gaps in implementation of SEZs in Azerbaijan. The necessity of enhance of the scientific discussions on the current issues is one of the main goals of the article and research work. On the basis of modeling and comparison in the article we try to find out if there is any need of SEZs in Azerbaijan and if the country is able to step over the apron of the economic system of the country in the near-term outlook and to realize the creation and functioning of the first SEZs in the real economic mode.

Analyses of the industrial sector and of the foreign trade turnover in Azerbaijan

During 2000-2012 the level of industrial production increased 10.7 times and in 2012 came to 44 billion USD.

In Azerbaijan, during the last decade the acceleration of the industrialization and renewal of the separate competitive traditional industrial sectors of the country are conducted on the basis of modern and high technologies. One of the main directions in this sphere is creation and functioning of the technology parks and increasing of the power of the industrial centers. For example, the Sumgait Technology Park operates in the industrial center of Sumgait city. It has 4000 employees and it is expected to increase the number of employees till 10000. The different compact plants are set up in the Park. They are specialized on different productions. These plants are notable for their high technology equipment bought from such countries as Germany, Spain, Austria, France, Finland and etc. There will be also set up the Sumgait chemical park, which will be located on the
168 ha of area with all necessary infrastructure and administrative structures. It is expected that 7000 people will be employed in the Park. The industrial priorities of the Park are connected with the development of such directions as polymer chemistry, automobile industry chemistry, construction, agriculture, medical and household chemistry.

The fact of implementation of the benefits in the Industrial parks as in SEZs attracts the considerable interest of the potential foreign investors. For example, in Sumgait Chemical Industrial Park the residents are exempted from income, land and property taxes for the period of 7 years. Besides it the equipment and technologies imported to the park are exempted from the VAT payment. It is expected that the creation of the chemical industrial Park will add huge impulse to the development of industrial in Azerbaijan, especially to the acceleration of development of the non-oil sector in the country. There are real investors who has the production lines. For example, on the production areas ‘Azertekhonline’ the plant on production of the steel pipes is put in commission and in a short time its expected to put in commission the plants on production of mechanical and hydrotechnical equipment. The productions of the plants will be used while construction of the oil-and-gas and waterpipes, petroleum refinery and etc. The production of Park will increase the effectiveness and safety of transportation of the gas of Azerbaijan for export, especially to the Europe.

The analyses of Dynamics of the foreign trade turnover in CIS countries in the period of 2000-2012 shows that Azerbaijan achieved the increase of the foreign trade turnover in 11.6 times.

As you can see from the growth rate of the foreign trade turnover, Azerbaijan takes the first place among CIS countries. However, the growth rate became slower these years and it is required to take more effective measures on diversification of the foreign trade turnover of the country (see Figure 1).

In Azerbaijan, one of the actual economic priorities is the increase of the effectiveness of export, provision of diversification and expansion of the geographical structure. The number of the foreign trade partners of the country came to 150, but the main direction of the foreign trade relations passes through Europe and Asia. Thus, if in 1995 the share of Europe in the foreign trade turnover of Azerbaijan was 40.2%, in 2005 it was 58.8 %; in 2010 – 57.7 %; in 2011 – 67.9 % and in 2012 – 52 %. The share of Asia in the same period was as following: in 1995 – 58.5 %; 2005 – 37.5 %; 2010 – 32 %. 2011-22.6 % and in 2012 - 38.7 %.

The stability of the share of Europe in the foreign trade turnover of Azerbaijan gives an opportunity to suppose that the country has solidly defined foreign trade priorities from European countries as main and strategic (see Figure 2).

![Figure 2. The geographic structure of foreign trade turnover of Azerbaijan for 2012 year (in %)](image)

Note: Figure prepared by the author on the materials of the SSCRA

Being the part of the former USSR, Azerbaijan carried out the foreign trade operations through Moscow and in the beginning of 1990-ies there was mainly a communication gap. In 1991 the capacity of foreign trade turnover of Azerbaijan was indicated as 4.0 billion USD. After Azerbaijan had received its independence, the previous economic relations crashed down sharply and it was required more than 10 tears for their reconstructions or creation of the new ones. Only due to the increase of export of the oil-and-gas resources of the country Azerbaijan restored its export power and began its diversification at the expense of activation of the non-oil sector. If judge the whole state of dynamics of the foreign trade turnover, we can see that its dependence from the oil sectors is especially tracked in the last years in the period of financial crisis and fall of oil production and etc. Thus, the volume of exports in 2012 decreased for more than 10% and this fact gives rise to an assumption that in short time huge energies will be required for the increase of the exports volume, line extension on the expenses of the competitive goods, acceleration of innovation of the export oriented

Figure 1. Dynamics of foreign trade turnover of Azerbaijan (1991-2012 years, in mln. US dollars)

Note: Figure prepared by the author on the materials of the SSCRA
enterprises, intensification of diversification of the structure of the foreign trade turnover in Azerbaijan.

As it is seen from the Figure 3, the first place in the list of partner countries of Azerbaijan in the foreign trade turnover for 2012 is Italy with the 17.3% part. The other European powers — France and Germany are also included in this list. Russian is the main partner of Azerbaijan in non-oil sector. The strategic partnership between Azerbaijan and USA and Azerbaijan and Turkey are reproduced in the positions they take among the partner countries in the foreign trade turnover.

Figure 3. Top ten countries-partners of Azerbaijan in the foreign trade turnover for 2012 year (share, in %)

Note: Figure prepared by the author on the materials of the SSCRA

Problems of the innovation activity in Azerbaijan

The issues of the expansion of the innovation activity takes the special place in the modern economic policies of the most countries of the world. Azerbaijan did not become exception upgrading its economic system and enriching it with the innovation functions. The country has conceptual basis of the upgrading policy and economic development which is based on the national interests and its economic safety [4]. However, from the point of view of the the world scientists and experts the national subject of the economics have to do a lot in order to provide the acceleration of realization of the innovation projects, implementation of scientific inventions, new technologies and etc [5].

It is necessary to enhance the innovation environment of the full value, technological zones in Azerbaijan. The issue is that the total volume of the innovation production and expenses on innovations in the industry of Azerbaijan for the last 5 years was not able to spiral intensively and there are problems in this sphere. For example, the total volume of production in the industry of Azerbaijan in 2008-2012 was only – 60.7 million USD. In 2012 the total volume of the innovation production was – 29.3 million USD, 98.3% of them is the part of the innovation production of the reclamation industry. The expenses on the technology innovations in the industry of the country on the types of the innovations was – 11.9 million USD in 2012, the 7.6 million USD of which was the innovation production and 4.3 million USD – the expenses of the process innovations.

The expenses on the technological innovations on the operation types and financial resources in Azerbaijan in 2012 was fixed at the level of 11.87 million USD, which were mainly formed for the account of the own resources of the enterprises (11.67 million USD). These means were mainly directed on the enterprises of the reclamation industry of the country (see Table №1).

Table №1. The volume of innovative products and the cost of innovation in the industry of the Azerbaijan Republic (thousand USD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Research and Development</th>
<th>Process</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>60.7</td>
<td>11.9</td>
<td>0.0</td>
<td>48.8</td>
</tr>
<tr>
<td>2009</td>
<td>58.3</td>
<td>11.3</td>
<td>0.0</td>
<td>46.0</td>
</tr>
<tr>
<td>2010</td>
<td>55.9</td>
<td>10.5</td>
<td>0.0</td>
<td>45.4</td>
</tr>
<tr>
<td>2011</td>
<td>53.5</td>
<td>10.1</td>
<td>0.0</td>
<td>43.4</td>
</tr>
<tr>
<td>2012</td>
<td>51.1</td>
<td>9.7</td>
<td>0.0</td>
<td>41.4</td>
</tr>
</tbody>
</table>

Note: Table drawn up by the author based on the SSCRA

The analyses of the innovation activity in Azerbaijan gives an opportunity to ask a question: What does prevent the intensification of the innovation activity in the country? According to our estimations which are based on the official statistics resources of Azerbaijan, the want of funds of the industrial enterprises, lack of finances and state support, non-competitiveness and unprofitability of the innovation production, the risk of implementation of the new innovation production, insufficient exploration of the world experience and weak exchange of the innovation technologies with the other countries slow down the development of innovation activity in the country. Besides, the absence of the functioning of the scientific and scientific-technical parks in the status of SEZ is also one of the main reasons of the weak innovation activity in Azerbaijan. I have to note that the government had already taken the measures on creation of the zone of high technologies, which are at the initial stage. However, it would be more advisable...
to explore deeper the world experience on the creation and functioning of the scientific-technology and innovation technical parks with the SEZ status and to realize its practical implementation in a short time.

**Importance of implementation of SEZ on expansion of the innovation activity**

During the last 20 years in the world economic processes the issues of organization and realization of the innovation activity is especially notable. The main principles of the innovation activity are the new higher level of development of he economic systems and economic priorities, development and realization of the effective technologies, economic mechanisms and instruments in the practic processes. Under the influence of the innovatibe pactultes it is possible to accelerate the enrichment of the national economic sectors by the determinants of the stable development of the economics in the country and also to increase its competitiveness and image among the world countries. By creation of networks of the innovation enterprises and economic subjects the development of the different regions can be activated by the way of implementing of the new economic instruments and etc. In the world practice the interconnection of the innovation functions is more freqient related to SEZ [6].

Many countries of the world actively used the different forms of SEZ in the expansion of the innovation activity, development, mastering and implementation of new technologies, creation of the networks of the competitive enterprises, increase of the export potential of the country, solving the social-economic problems including the opening of new work places, reinforcement of employment and decrease of poverty [7; 8]. For example, during the last 30 years the developing countries achieved the huge economic success and consolidated their positions in the range of counties with the strong economics by the way of implementation of SEZ. China, using the different types of SEZ and their implementation to the economic systems of the country not only provided the accelerated development of the different regions of the country but also gained an opportunity of transition to the innovative economics, providing the different economics sectors with the effective economic instruments [9]. In China, they began to actively implement the different models of SEZ on the expansion of the technical-economic development of the country while considering the stable development of the economics [10]. Only during the last 15 years of XX century there were created and actively functioned 50 zones of the technical economical development (TED). The part of such SEZs in the total volume of the national production of China was 5%, in industrial production – 6.7 %, in export - 10.1 %, the part in foreign investments – 18 % and in theannual volume of export it was approximately 40 billion USD [11]. In the economics of China 100 billion USD were invested for the intensification of the activity with the help of SEZ. 100 thousand people are employed in the Beijing Experimental Zone of development of new technologies; they are ingade in the scientific-research activity in the 130 innovation oriented enterprises. More than 220 enterprises of the high technologies equipped with the innovation instrument function in the Nankhum Technological park of China [12].

Today the countries with the strongest economics, such as, USA, actively use the SEZ models on the expansion of the innovation activity inspite of the total liberalization of their economics and trade. Not by accident the most powerful and multifunctional scientific and scientific-technical parks, which skillfully took advantage of the facilities of SEZ are functioning in USA.

The volume of the manufactured production in SEZ of the country per year increased to 140 billion USD and approximately 400 thousand people work there. Approximately 2000 zones function in 49 states of USA. One of the largest SEZs in the world “Silicon Valley” generated in California in 1983 as a technological park has 30% of the construction potential of the world information science and 15% of the construction potential of the industry in the world [13]. In Japan, the aim of innovation of the national economics was mainly creation of the scientific and technological base with the help of specific form of SEZs – technology towns. More than 20 technology towns function in the country and productive scientific-technical bases are formed there. The most precise equipment in the world is developed and manufactured in this technology towns [14].

During the last 20 years, the number of post-socialistic and post-soviet republics have been trying to innovate their national economics and thus they need the progressive forms of the economic mechanisms of the innovation orientation, which are the different forms of SEZ. For example, Poland in the post-socialistic period in the processes of upgrading of the industry of the country and transition to the more deep market economy actively used the implementaton of SEZ as the innovation economic instrument.

In the beginning of XXI century, in the 14 SEZs of Poland the volume of investment was 2.3 billion USD and 115 thousand people were employed there, and in Hungary there were actively used the industrial modifications of SEZ, in which 110 industrial zones were created; the annual volume of the production manufacturing was 6 billion USD. In the post-socialistic Vietnam the number of SEZ was

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180. Geographically they covered 53 provinces of the country and the total volume of investments was 24 billion USD. 1 million people is employed in the SEZs of the country [15]. The number of post-soviet republics (Russia, Kazakhstan and etc.) created and brought to function the different SEZ models of the scientific, technological and innovation direction [16]. In Russia the technological parks and innovation centers funktion in the most regions of the country with the aim of the innovation development [17].

**Issues and perspectives of implementation of SEZ in Azerbaijan**

The history and experience of the world SEZ give ground to note that the creation and functioning of SEZ is accompanied by the serious problems of different origin. However, Azerbaijan alongside with the former soviet republics have not achieved the significant success on implementation of SEZ in the economic system yet. Beginning from 2007 Azerbaijan sequentially take measures on creation and functioning of SEZ. The world experience is explored, the scientific law discussions on the features of such zones are intensified, the legislation base is formed, the priority models of SEZ are defined. In 2009 the appropriate law on SEZ operations was accepted. According to the law the mail strategic aim of SEZ in Azerbaijan is additional motivation for development of the enterprise, increase of competitivenes of economics and export potencial of the country. The necessary legislation acts, rules and norms, procedures and regimes on organization and managing SEZ in Azerbaijan were developed. The rules of competition conduction for determining the company-operator on SEZ management are maintained. However, the first competition has not been conducted yet in Azerbaijan and this causes to think about availability of problems and difficulties in this sphere.

It is worth to note that the groups of scientists and researches explored the basis of the problems, which delays the implementation of SEZ in the economic system of Azerbaijan. In whole the scientists regret about the delay of implementation of such economic instruments into the economics of the country and they think that it is necessary to accelerate the creation and functioning of the first SEZ on practice. In the scientific discussions they note that in Azerbaijan SEZs are not provided with the sequence on creation and functioning. According to our estimations, the necessary scientific information base has already accumulated in the country and there is the legislation base on implementation of SEZ in practice. With this aim, first of all it is necessary to form and realize the sequence state economic policy in the given sphere, to form and accept the National Economy Strategy on creation and functioning of SEZ, provide the activization of the scientific-practical discussions, hold the competition on the management of such zones and etc. As the quilitative priority models and directions of SEZ on implementation in Azerbaijan can be the creation of SEZ in tourism, textile industry in more depressive territories – the border district and etc.

The conducted researches give us an opportunity to suppose that the acceleration of creation of SEZ institute in Azerbaijan will render the effective assistance in the increase of the competitivenes of economics of the country, strenthen the processes of upgrading and procurement of high capital, new technologies, increase the export capital of Azerbaijan and essentially improve its image among the world countries.

**Conclusion**

The researches and analyses of the economic processes in Azerbaijan in 1991-2013 let us to draw conclusions on the different issues:

- Certainly, Azerbaijan reached the historical level in development of the national economics of the country as the independent state;
- The country provided the stable growth of economics, the main stages of the economic reforms are finished, the principles of the market relations in all the spheres of economics were wrapped up in, The realization of the large infrustructe objects are provided;
- Azerbaijan became an important economics country in the region and actively integrates into the world economic system;
- The country is on the first lines among the post-soviet republics on competitivenes of economics and in a short time has the historical chances to enter the list of first 30 countries of the world accoring to the competitiveness and etc.

However, during the last years the economic development slowed down, the oil extraction in Azerbaijan is not of stable development, intensification of innovation of economics is not still provided, the level of the innovation services and volume of the innovation production is lower that the potential.

The renewal and enrichment of the economic system in the country at the expence of more effective economic mechanism of such SEZ did not entered the intensive phase. With the aim of activization of the innovation activity and implementation of the effective economic instruments in Azerbaijan form our point of view it is necessary to realize the following:
– Develop and realize the National Innovation Strategy on creation and functioning for the future 15-20 years;
– To strengthen the work on finishing the events on implementation of SEZ into the economic system of the country with the aim of activation of the foreign capital and investors in the economic processes of the country and etc.;

According to our estimations, the creation and functioning of SEZ in Azerbaijan can cause the expansion of the network of competitive and export oriented enterprises, entry of the world markets, integration processes, cooperation relations and etc.

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