

**THE ISSUES RELATED TO FORMATION OF COMPETITIVE STRUCTURE OF
INDUSTRY IN AZERBAIJAN**

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Abstract

The article was dedicated to acceleration of structural changes in industry of Azerbaijan, its optimization and formation of competitive structure. The article analyzed the structural changes in Azerbaijani industry during 1990-2012 and investigated the trends of these changes during the recent period. The purpose of the research is identification of ways for improvement of structure the Azerbaijani industry through studying its current condition and preparation of advises in respect of its optimization based on theoretical and practical experience. In research we have identified the inherent features of Azerbaijani industry and factors affecting it. The research was conducted based on abstraction and systematic analysis, statistical and logical summary. As a result, we came to conclusion that in order to accelerate the optimization of industrial structure in Azerbaijan the acceleration of re-structuring and privatization is required. The practical importance of the research: the utilization of practical advises provided in the research could contribute to the improvement of competitiveness of local industry, its restoration and government's role in its future development.

Key words: industry, optimization, investment, competitiveness, technology.

JEL Classification Codes: L 16

Introduction

Industry plays important role in the economy of Azerbaijan Republic. The potential and financial opportunities of industry in comparison with other sector of the economy are much higher. During long-lasting years the industry constituted the basis of national economy. The industry in Azerbaijan has not only high potential, but also large perspectives. During transition from planned to market economy the industry was a sector of the economy, which incurred the largest losses. Thus during the transformation process lasting till 1996 the production volume decreased by 3.5 times and accounted for only 28% of level achieved in 1990. Further till 2010 the economic and industrial development in the country was achieved basically by the means of fuel-energy complex. Development of this sector brought about significant changes in industrial structure of the Azerbaijani industry. Although the production volumes during this period were 2.5 times higher than these in 1990, the refinery related volumes achieved only 45% of level indicated in 1990. Due to the fact that the industry developed in this pattern during the post-crisis period, the portion of oils sector in industry increased, while the production in non-oil sector decreased significantly.

All these factors required the significant structural changes in Azerbaijani industry and brought to agenda the formation of its competitive structure. As a result we analyzed the structural changes which took place during the period 1990-

2012 and investigated their recent trend. In accordance with the purpose of the research we provided the advices in respect of improvement of structure of the industry, its optimization and competitiveness.

The development stages of industry in Azerbaijan

Industry is the most important force in Azerbaijani economy. This sector employs 13.5% of labor forces of Azerbaijan and utilized 55.4% of assets available. This sector accounts for 36.4% of attracted investments, 50% of gross product and 64% of net income generated in the country.

During the period of transformation from planned to market economy (1990-1996) the industrial production in Azerbaijan decreased to 28% of production in 1990 or by 3.5 times. Till 2010 further development of country was achieved by the development of oil and gas sector. Development of this sector brought about significant changes in structure of Azerbaijani economy. Although the production level in this period was 2.8 times higher than that in 1990, the refinery related volumes achieved only 45% of level indicated in 1990. Due to the fact that during the post-crisis period the economy developed basically owing to this sector, the portion of goods produced by this sector increased from 10.1% in 1990 to 79.8% in 2010. Thus the weighted average of production of good sector decreased from 26.6% to 1.4%, weaving production from 19.9% to 0.1%, production of machines and vehicles from 20.3% to 0.9%, chemistry industry from 5.3% to 1%. At the

same time the competitiveness of non-oil sector decreased significantly. In 2010 oil and gas related products accounted for 94% of total export of Azerbaijan, while vehicles, machines and other equipment accounted only for 0.2% of total export. However vehicles and equipments accounted for 28% of total import during this period. The decrease in competitiveness of non-oil products and accelerated development of oil extraction related industries played the specific role in expansion of extraction industry.

Industry in Azerbaijan increased annually at average by 10% from 1997 till 2010, thus the growth rates in 2005 was 33.5%, in 2006 36.6%, in 2007 24%. However such a high growth was owing to oil and gas sector. Signature of number of agreements with the foreign companies provided an opportunity to develop oil and gas industry. Thus in 2009 the industrial production increased by 3.4 times, extraction industry by 5.2% and refinery industry by 1.5 times in comparison with 1995. Due to significant impact of transition period, the initial production level of 1990-s was achieved only in 2009.

Table 1. Overall economic ratios of Azerbaijani industry

Ratio	Measurement unit	2000	2005	2010	2012
Volume of industrial product	Current prices, mln AZN	3639	9309	27987	33945
The number of operating companies in the industry	unit	1974	2621	2650	508
Annual average number of employees	Thousand person	200	193	182	84
Average nominal monthly salary/wage	AZN	87	197	452	99

Comparison with average salary in whole country	%	197	159	136	52
Fixed Assets	Mln AZN	7257	18225	37248	5895
Portion in GDP	%	36	49	52	55
The portion of attracted investments to total investments in country	%	69	72	43	42

Source: Azerbaijani statistics, 2012, State Statistical Committee of Azerbaijan Republic, Baku, Seda, 2012, p. 447; Azerbaijan in figures, p. 68.

As we can see from table 1, industry in Azerbaijan develops promptly. There are increases in portion of GDP, average salary and fixed assets. Thus average salary in Azerbaijan in 2011 was equal to 364 AZN and in 2012 to 519 AZN, however average salary in the industry was equal to 519 and 600 respectively. At the same time the investments into the industry decreased from 69% in 2010 to 42% in 2011. At the same time number of companies working in the industry decreased from 2650 to 2508 and number of employees decreased from 200 thousands to 182 thousand from 2010 to 2011.

Table 2. Structure of industry (% of total)

	1990	2000	2005	2010	2012
Total industry, Including:	100	100	100	100	100
Mining	10,1	53,4	67,4	78,8	75,4
Refinery	85,3	31,4	25,9	16,0	18,9
including:					
Production of goods	26,6	2,6	3,2	1,5	7,3
Weaving	19,9	0,9	0,4	0,1	0,2
Chemistry industry	5,3	3,4	2,4	0,5	0,5
Metallurgy	3,7	0,1	3,2	0,5	0,9
Production of vehicles	20,3	1,1	0,4	0,6	0,4
Other refinery sectors			16,3	12,7	9,6
Electricity, gas and steam production	4,1	13,5	5,7	4,6	2,2
Water supply, collection and refinery garbage	0,5	1,7	1,0	0,6	0,6

Source: State Statistical Committee of Azerbaijan republic, Azerbaijan in figures, p. 70-71.

As we can see from table 2, in 1990 the portion of mining in total industrial product in Azerbaijan was equal to 10.1%, refinery accounted for 85.3%, Water supply accounted for 4.1% and collection and refinery garbage accounted for 0.5%. However due to development of mining during the recent years, its portion in 2000 increased to 53.4%, in 2005 to 67.4%, in 2010 78.8% and in 2012 to 75.4%. However the refinery sector's portion decreased from 85.3% to 14.3%, considering the households this amount is equal to 18.9% (Azerbaijani statistics, 2012, p. 451-452. 2013.p.70-71).

Formation of competitive environment for non-oil sector

During the recent years the Azerbaijani industry is experiencing two trends affecting each other by multiplicative effect:

The first trend: Prevailing growth temp of the mining industry and growth temp of the other oil-industry begin to influence to structure of the industry in general. Oil production increased by 10.3 percentages and has come down by 2.3 percentages in 2012, non-oil industry increased by 7.1 percentages in 2011 and 7.8 percentages in 2012. If the portion of the mining industry increased from 78.9% in 2010 to 80.5% on 2011, the refinery sector decreased from 15.9% in 2010 to 14.3% in 2011.

The second trend: the structural changes are observed in non-oil sector as well. At the beginning some imported products started to be produced in Azerbaijan. For example, vegetable oil, tobacco, dairy products, juices and other products, quality of which goes with imported ones.

As we can see, effective from 2010 the portion of extraction industry started to decrease and on other hand the non-oil sector started to develop rapidly. Thus the weighted average of energy complex in total industry decreased from 79.8% in 2010 to 75.4% in 2011. This trend is observed in some extent in export as well. In export the portion of oil and gas related products decreased from 94% to 90.2%. At the same time further increase was in other sectors like fruits and vegetables 1.11%, vegetable and animal oil by 0.93%, chemistry industry by 0.73%. However the portion of oil and gas industry remains high enough.

Figures show that if Azerbaijan industry develops other quickly, non-oil sector has not been restored of the industry areas to the previous level and its competition superiorities. The labor productivity in refinery sector was 6.8 times lower than in mining and 29.6 times lower than in other realms of industry. Such conditions increase the gross margin of the products and have negative impact on competitiveness of the products.

Table 3. Foreign turnover of basic products of Azerbaijani industry (2010)

Name of the product	Import, thousand US dollar		Export, thousand US dollar	%
Total	6599354,7	100,0	21324777,7	100,0
Mineral products	208159,5	3,2	20083591,0	94,2
Chemistry products	437786,0	6,6	47886,7	0,2
Weaving	60850,1	0,9	42785,2	0,2
Stone, concrete, asbestos, ceramics and glass production	201714,5	3,1	1386,6	0,0
Low value metals and products produced from them	925153,1	14,0	126221,4	0,6
Machines, vehicles, electronic and etc.	1902650,0	28,8	39530,9	0,2
Transportation vehicles	796718,3	12,1	181123,2	0,8
Optical, topographic, medical, musical and other equipment	174705,4	2,6	7019,0	0,0
Other industrial products	94253,6	1,4	4611,7	0,0

Source: State Statistical Committee of Azerbaijan Republic.

Although during the recent years there were significant improvements, the Azerbaijani industry was not able to develop the highly efficient and ecologically safe production process. The reason why competitive and scientific products are not produced by the Azerbaijan industry is that there is not sufficient technological innovations. It is connected with the low level of investments to this industry. As a result it was not possible to involve the new technology in order to achieve the competitiveness, cost reduction and efficiency.

Role of innovation in industrial structure

Current situation with optimization of industrial structure cannot be considered as acceptable. The main reason for this is that low level of investment is accompanied with the fact that technological processes do not affect the structural changes. In 2012 the investment directed to the industry was equal to 5609 mln AZN. 65% of this investment or 3651 mln AZN were directed to mining and 12.5% or 700 mln AZN were spent for refinery sector. This amount exceeds the demand of refinery industry in investment. In the industry innovation related expenditures decreased from 53.3 mln AZN in 2005 to 32 mln AZN in 2012. However the newly produced types of products accounted only for 0.04% of total produced volumes.

According to analysis performed by the World Bank and World Trade Organization for 183 countries, although the oil and gas related products of Azerbaijan has great competitive advantages, new products produced during the

recent years like fruit and vegetable juices, refined tobacco, fur and leather, refined cotton, cotton oil, seaflower oil turned into the competitive products on world-wide market. At the same time the products made by the chemistry industry like politer, propylene and plastic have also competitive advantages. On other hand the products of non-oil industry like pumps, liquid elevators, gas/water/electricity meters, towing ships, magnate strips and etc. have also competitive advantages. Considering all above mentioned factors we came to conclusion that Azerbaijani industry can develop sectors other that oil and gas industry and gain competitive advantage there. At the same time developing of chemistry industry will provide an opportunity to produce other diversified products.

Table 4. Investments directed to Azerbaijani Industry

	2005	2010	2011
Total Industry	4 176	4 276	5 370
Foreign investments	3 350	1 917	2 125
Local investments	826	2 359	3 245
Mining	3 730	2 952	3 244
Foreign investments	3 210	1 883	1 894
Local investments	520.6	1 069	1 350
Crude oil and natural	3 606	2 933	3 022
Foreign investments	3 210	1 881	1 894
Local investments	396.0	1 052	1 128
Refinery	115.8	510.2	847.9
Foreign investments	35.9	1.1	0.2
Local investments	79.9	509.1	847.7
Production of goodies and food	28.0	27.1	46.5
Foreign investments	8.9	1.1	-
Local investments	19.0	26.0	46.5
Weaving	2.1	9.8	0.2
Local investments	2.1	9.8	0.2
Production of oil products	26.8	25.4	48.4

Local investments	26.8	25.4	48.4
Chemistry industry	5.6	1.3	1,5
Foreign investments	0.3	-	-
Local investments	5.3	1.3	1,5
Production of construction materials	9.5	195.2	139.7
Local investments	9.5	195.2	139.7
Production of machines and equipments	3.1	0.2	0.1
Foreign investments	2.8	-	-
Local investments	0.3	0.2	0.1
Local investments	-	0.5	0.6
Electricity, gas and stream production, allocation and supply	299.8	422.6	768.9
Foreign investments	98.4	23.0	188.2
Local investments	201.4	399.6	580.7
Water supply, garbage collection and refinery	30.0	391.5	508.5
Foreign investments	5.8	10.3	42.0
Local investments	24.1	381.2	466.5

Source: State Statistical Committee of Azerbaijan Republic

Therefore the government supports the production of goods with competitive advantages, encourages their export and applies necessary measurements for the limitation of import of these products.

From information provided in table 4 we can see that although the investment in Azerbaijani industry increased in overall, foreign investments in 2005 decreased from 3350 mln AZN to 2125 mln AZN in 2011, while local investments during the same period increased from 826 mln AZN to 3245 mln AZN. During the same period investment volumes decreased by 15%, at the same time foreign investments decreased by 1.7 times, investment into the refinery sector decreased by 7.3%, at the same time foreign investments decreased by 180 times and local investments by 11 times. Such changes in the structure brought about the natural decrease of extractive

industry and increased in refinery production. Recent research shows that during 1998-2011 development of industry was due to the mining sector. This is related with the large portion of products of the mining sector. At the same time the volume of mining related products decreased from 80.7% in 2009 to 78.2% in 2011 (Azerbaijan statistics, 2012: 848-469).

We would like to note that prior to the market reforms in Azerbaijan two basic sectors were supported by investments: light industry (2005: 2.1 mln AZN, 2010: 0.2 mln AZN) and food industry (2005: 28 mln AZN, 2010: 45.6 mln AZN). These figures indicate that the demand for investments for food and light industries is still not provided; as a result the production of this sector is still below the other ones.

Major part of the Companies operating in Azerbaijan is remaining from the Soviet period. Therefore the fixed assets available in these companies are not updated. (Azerbaijani statistics, 2012, p482-487). In such conditions these assets require the significant improvements. Nowadays the major part of the companies does not use the strategic management. The absence of development strategy limits their opportunities of success. Therefore, application of market strategies, identification of competitive advantages and evaluation of market positions is essential for the local companies.

During the last 10 years investments in amount of around 10 mlrd US dollar were attracted to the Azerbaijani economy and the major part of this amount was

applied to the industry. At the same time the growth temps of industrial product is below the growth of gross domestic product. For example, in 2012 GDP increased by 2.2%, while the volume of industrial product decreased by 3.8%. This prevents the industry for being the moving power of national economy. At the same time in 2012 oil portion of GDP of Azerbaijan decreased from 52.47% to 47.3%, there is an intention to decrease the portion of the oil sector to 20% till 2020. Such changes in the structure of the industry will have the positive effect on overall production and as a result of portion of the oil industry decreased from 78.7% to 50% and the portion of refinery industry should increase from 13.4% to 43-45%.

In order to make the Azerbaijan to improve that competitiveness of local product and compete with leading economies on the world market, significant improvements, structural changes and acceleration of the innovation process in the industry are required.

Table 5. Expenditures for innovation by investment type (thousand AZN)

	2005	2010	2011
Total industry	53 273	8 139	31 589
Product innovation	53 272	7 952	30 904
Process innovation	0.8	187.3	684.6
Mining	43 892	4.8	692.9
Product innovation	43 892	4.8	692.9
Process innovation	-	-	-
Refinery	8 573	8 128	29 319
Product innovation	8 572	7 941	28 634
Process innovation	0.8	187.3	684.6
Production of food	3 422	690.6	782.8
Product innovation	3 421	690.6	208.3
Process innovation	0.5	-	574.5
Oil products	-	1 635	5 378

Product innovation	-	1 635	5 325
Process innovation	-	-	53.4
Chemistry industry	38.8	177.6	-
Product innovation	38.8	-	-
Process innovation	-	177.6	-
Production equipment and vehicle	57.2	0.7	196.8
Product innovation	57.2	0.7	196.8
Process innovation	-	-	-
Electricity, gas and steam production and allocation	808.5	-	-
Product innovation	808.5	-	-
Process innovation	-	-	-
Water supply, collection and refinery of garbage	-	5.7	1 577
Product innovation	-	5.7	1 577

Source: State Statistical Committee of Azerbaijan Republic

As a result of financial crisis the product market significantly decreased and competition as a result became tougher. The country, which could overcome this competition, will obtain the competitive advantages. The results of the financial crisis taught the significant lessons. Development of industry and supporting of competitive advantages will provide the grounds for sustainable growth. The factors affecting the competitiveness level are strategic behavior (strategic pricing, advertisement, differentiation of the products) of suppliers, producers and customers, technology of production, the dynamics, institutional factors, foreign competition and other (Porter, International competition, 1993: 896-26.).

In conditions of international competition each sector has both relative standards (they are applied internally within the country) and absolute standard without which the competition with the foreign competitors is not possible. In cases when even the most efficient sector loses in competition with the foreign

competitors, it brought about decrease in salaries and slows down of economic development. Therefore in more complex sectors maintenance of competitive advantages provides the grounds for economic development. In cases when competitiveness of the products is based on quality and prices its competitive advantages are also based on prices and quality. According to analysis performed by the World Bank and World Trade Organization for 183 countries, although the oil and gas related products of Azerbaijan has great competitive advantages, new products produced during the recent years like fruit and vegetable juices, refined tobacco, fur and leather, refined cotton, cotton oil, seafloor oil turned into the competitive products on world-wide market. At the same time the products made by the chemistry industry like politer, propylene and plastic have also competitive advantages. On other hand the products of non-oil industry like pumps, liquid elevators, gas/water/electricity meters, towing ships, magnate strips and etc. have also competitive advantages. Considering all above mentioned factors we came to conclusion that Azerbaijani industry can develop sectors other than oil and gas industry and gain competitive advantage there. At the same time developing of chemistry industry will provide an opportunity to produce other diversified products. Therefore the government supports the production of goods with competitive advantages, encourages their export and applies necessary measurements for the limitation of import of these products.

Table 6. Innovation level and the volume of innovation product per type of economic activity (mln AZN)

	Significantly changed and newly applied product				Improved product			
	2006	2009	2010	2011	2006	2009	2010	2011
Industry, total	1852	730,9	4 384	13 163	693,3	68,9	2 029	14403
Mining	323,0	-	-	2 073	-	-		10 430
Refinery	1529	730,9	4 384	11 090	693,3	68,9	2 029	3 973

Note: excluding small business

Source: Statistical Committee of Azerbaijan Republic

In order to get competitive advantage in non-oil sector, the producers should bring to market new products at lower prices and of the same quality or products at higher prices and higher quality. In period of labour diversification the production of one product can be realized by participation of various sectors. The production of competitive product depends on provision and supply with high quality raw materials, existence of specialized personnel and wide sales network. The competitiveness of the products in Azerbaijan depends on establishment of these factors. The experience shows that during transition period the countries have lost the production and realization relations, which significantly affected economic development. This occurred due to the fact that investments made prior to the transition have lost their value. On macro-economic level the factors affecting the competitiveness of the industry include openness of economy, quality of government policies, efficiency of fiscal policy, level of development of the infrastructure, mobility of labor market, education level of labor forces, perfection

of management, quality of social institutes (Albegova and others, State economic policy, 1998: 320-257).

Table 7. Update of production funds of the industry

	2005	2010	2011
Industry- total	15.5	7.9	7.7
Mining	20.4	7.9	9.0
Crude oil and natural gas extraction	21.1	7.7	9.0
Refinery sector	3.4	5.5	6.7
Production of food products	2.4	2.6	6.9
Weaving	1.5	0.5	6.8
Clothes production	2.1	0.0	0.1
Production of oil products	7.8	5.6	12.9
Chemistry products	1.6	0.8	0.8
Metallurgy products	0.5	0.4	20.0
Production of electric products	3.6	0.2	5.8
Production of machines and equipment	3.5	18.7	3.2
Electricity, gas and steam production, allocation and supply	2.5	10.2	1.8
Water supply, collection and refinery of garbage	1,7	8,2	4,1

Source: Statistical Committee of Azerbaijan Republic

1998-2011 development of industry was due to the mining sector. This is related with the large portion of products of the mining sector. At the same time the volume of mining related products decreased from 80.7% in 2009 to 78.2% in 2011 (Azerbaijan statistics, 2012: 848-469).

Efficient allocation of the resources brought about both efficient utilization of these resources and plays significant role in production of competitive products. Transfer of Azerbaijan from planned to market economy significantly affected all local companies and made them to realize the restructuring. However according to our researches improper strategic planning and not readiness for restructuring brought

about decrease in production. Application of passive strategy instead of active one, slow resolution of new problems decreased the competitiveness of the products.

The renovation and technical restoration based of the industry is implemented as part of investment programs. In this case the production became more effective and technical base of production development is created. We would like to no two basic conditions: the potential of investment process depends on technical level of the production and its ability to adopt the improvements and updates; second, during recurring production investment plays important role in the reconstruction of the production process. The volume and direction of the investments defines the temps of changes and growth of national economy. Nowadays in order to develop and improve the refinery sector economy need the large volume of investments. From this point of view improvement of technical base in existing refinery related factories is essential. This explained by the fact that in cases when factory is not technically well equipped the production of high competitive products is limited, and this negatively impacts the efficient management of production, human and resource management. In some sectors, like food industry, chemistry and oil-chemistry, the technical development of the equipment directly impacts the quality of produced products.

The upgrade the technical base of the industry faces number of problems. In such conditions the development of the industry in cluster forms is essential. This

is due to the fact that the development of production with high technological level depends on technological development of related industries. Therefore the development of industries technically supporting other related industries is very important. The government should realize encouragement of internal demand, encouragement and regulation of export, encouragement of technological development, application of optimal government partnership in strategic sectors, support of cluster development, direct investment support of strategic industries, tax allowances, attraction of foreign capital and etc (Economic issues, 2012: 144).

Major part of the Companies operating in Azerbaijan is remaining from the Soviet period. Therefore the fixed assets available in these companies are not updated. In such conditions these assets require the significant improvements. Nowadays the major part of the companies does not use the strategic management. The absence of development strategy limits their opportunities of success. Therefore, application of market strategies, identification of competitive advantages and evaluation of market positions is essential for the local companies.

The role of the management in industrial companies

The efficiency of the production and administrative operations of the company depends in level of the management. This level is valued by the quality and professionalism of the management. In market conditions when there is lack of professional managers in the country, the attraction of professional managers for

management of particular companies in the country is appropriate measurement. Such managers are able to apply their experience and held local companies to integrate with the foreign ones. We believe that income generated from the oil sector could be directed to acquisition of foreign business and their further merger with the local companies, which will turn into the pushing power of the national economy.

Fixed assets in the most sectors of the local industry do not go with the current requirements (Azerbaijani statistics, 2012: 848-502). From the information from table 7 we can see that the upgrade and improvement of technical base during the recent years slowed down. It is reflected at the biggest extend in refinery sector.

We believe that income generated as a result of successful implementation of oil strategy in our country could be directed to acquisition of foreign business and their further merger with the local companies, which will turn into the pushing power of the national economy and support the structural change and optimization of the local industry.

Table 8. Forecast on GDP and industry growth in Azerbaijan (% of previous year)

Years	2013	2014	2015	2016
Temps of growth of GDP	5,3	7,0	4,5	4,5
Total industry	-1,3	6,5	1,3	1,6
Mining and quarry	-3,7	6,0	-0,1	-0,1
Refinery sector	16,3	10,2	7,5	8,8
Production of food (including tobacco and drinks)	4,4	4,4	5,1	5,4
Weaving	9,8	11,9	12,1	15,3
Chemistry	66,4	18,4	18,7	19,1
Metallurgy	18,6	-9,1	12,5	7,4

Production of machine and equipment	5,1	84,5	22,0	21,7
Optic and electric equipment	8,9	9,2	10,2	10,3
Electricity, production and distribution of gas and water	3,6	4,4	5,9	3,7

Source: Ministry of economic development of Azerbaijan Republic. Mid-term (2013-2016) priorities of social-economic development

As we can see from the information provided in the table 8, according to the prognosis of Azerbaijani government the growth of extraction industry will be annual 2.6% during the period 2013-2016. In the mining sector increase will be only in 2014 and will be decrease till 2016. Considering that this sector accounts for the large part of national GDP its decrease has significant impact on GDP. However establishment appropriate environment for investment during 2013-2016 will provide the ground or intensive development of non-oil industry. Weaving, chemistry, metallurgy, production of machines and equipment expected to increase by 3-8 times. For example, during 2013-2016 increase in machine production is expected to be 34.9%, particularly in 2013 5.1%, in 2014 84%, in 2015 22% and in 2016 21.7%. this will affect the increase the portion of non-oil industry. We believe that it will bring about increase in growth rates, quality, and decrease in cost of production and improvement in competitiveness of the industry.

The directions of improvement of industrial policy on Azerbaijan

In order to accelerate the structural changes in Azerbaijani industry and resolve the problem of its competitiveness both on local and foreign markets we

need to identify the optimal combination of competition policy and implement the following measurements:

- ✓ Acceptance of “Competition code” and respective legislation base for efficient implementation of industrial operations, acceleration of existing problem resolution in the industry, increase the efficiency of government support, formation and development of industrial complex;

- ✓ Continues realization of measurements for restoration of operations of strategic companies and organizations;

- ✓ Acceleration of restructuring and privatization of non-oil related industries;

- ✓ Acceleration of transfer of companies to international standards based on new technologies;

- ✓ Acceleration of the process of propaganda of investment activities;

- ✓ Allocation of industries in accordance with their importance for the economy;

- ✓ The improvement of technical base of institutes and organizations dealing with development of scientific based sectors;

- ✓ Upgrade of industry from technical point of view and establishment of modern industrial complexes in the regions of the country;

- ✓ Encouragement of production of goods, which could compete with foreign ones and could be exported;

- ✓ Support industrial clusters and modern industrial complexes;

- ✓ Encouragement of production of exportable non-oil products;
- ✓ Acceleration of the process of establishment of industrial towns and free economic zones, which will support the development of the industry in the country;
- ✓ Support of traditional types of production;
- ✓ Expansion of application technologies saving energy and resources.

Application of high level technologies turned into the necessary condition of long-term competitiveness. Nowadays transition to new technology base strategy is not possible without the active involvement of the government. Therefore the restoration of education system and involvement of the technology into the industry is important. The national policy of innovation is directed to formation of national innovation system. The basic goals of this policy attraction of educational organizations, National Academy of Science and other organizations to collaboration in formation of innovation base of national economy. The government should resolve the following issues within the national innovation system:

- ✓ Support of relations between different sectors of national innovation system;
- ✓ Restoration of scientific research activities in science related organizations and restructuring of National Science Academy;

✓ Creation of companies with strong scientific and research departments or formation of production and technology sector with horizontal and vertical integration;

✓ Improvement of financing mechanisms of science related sectors;

✓ Preparation of management and personnel, which will be able to manage the innovation based system.

The formation of Azerbaijan Investment Fond played the important role in development of appropriate environment of attraction of innovation. The fund should make decisions on financing of real innovation projects. In our opinion, this fund will play intermediary role between the industrial sector and organizations developing the innovative technology. The government policy is directed not only on implementation of innovation model, but also improvement of industrial structure. In some cases in order to increase the efficiency the government is required to incur the costs. In order to make such expenses maximum efficient, the government should identify the priority sectors and establish the measurements in sequence with supports this priority allocation. The experience shows that the development of weak sectors on account of benefits gained from the strong ones is not always successful. In some cases such activity could decrease the competitiveness of the entity and bring about additional problems. Therefore

during the preparation of innovation strategy it is important to identify the priority sectors and their opportunities.

Nowadays the process of development of the industry and its competitiveness requires the government to support the new technologies, increase the quality of produced goods and decrease its cost of production and implementation of necessary measurements. These measurements should be implemented both on macro and micro-economic level, because increase in competitiveness is based on efficient utilization of the resources. Due to the successful implementation of oil strategy the government of Azerbaijan has vast opportunities for improvement of industrial structure and competitiveness.

Financing of the companies for technological development plays important role in government policy on improvement of competitiveness. During the preparation of industrial policy we should consider the encouraging and distribution functions of taxes. The level of taxation significantly impacts the cost of the manufactured goods and its competitiveness.

The decrease of tax burden plays the positive role in economic growth. At the same time the competitiveness of the industry depends on efficient utilization of the resources by the government. Therefore we should identify the optimal level between the tax burden and benefits provided to the public.

Although the customs policy significantly affects the structure of the industry, it plays significant role in protection of the local market. This is due to the fact that the development of local industry is possible only owing to the foreign markets and it is not possible to realize the full capacity of the production on the local market. At the same time the customs could be used as tool for foreign policy. In other words, for the country, which does not provide the appropriate conditions for the Azerbaijani goods, the government could apply these methods. At the same time the induction of the country into the World Trade Organization will require the update the tariff system. Currently as a result of negotiations the tariff level for the industrial products was agreed at 10.4% level. However it is planned to set them on 0-50% level. The joint to the World Trade Organization considers the application of high tariffs for weaving products, furniture and metallurgy. However the products which are used as raw materials in Azerbaijan are planned to be free of tariff. We believe that this approach is optimal. We would like to note that identification of tariff rates for industrial products without the respective consolidated policy creates difficulties. The government should participate in negotiation and establishment of tariff plan within WTO. This will provide the opportunities for the government in the future. However we would like to note that sometime the industry is located close to consumers or close to suppliers. Therefore allocation of some industries limit the ways for influences them by the

means of customs tariffs. At the same time in some cases the production is not limited locally and customs policy does not affect it. Therefore during the preparation of the strategy it is important to consider such points. In general, we believe that entrance of Azerbaijan to the World Trade Organization will have minor negative effects.

In order to support the local products which enter the foreign markets with advertisement, marketing and realization, it is important to establish Organization of Support of Export Development. The establishment of this organization together with interested companies would be efficient.

The researches show that, the substitution of imports and provision of financial allowances is limited from industry and competitiveness development points of view. Therefore it is important to develop the technical base of the industry in order to achieve these results. The basic role of the government in this direction is establishment of development institutes. These institutions should finance and create the appropriate conditions for the private sector.

During the recent years the most representative example of collaboration of the government and private sector was establishment of “Azerbaijan Investment Company” based on decree of the President on “Measurements for development of investment activities” dated by 30 March 2006. The purpose of the entity is capital injection to the companies engaged in the non-oil sector and their further

development. We believe that expansion of the operation of such companies is very important and has significant impact on the national economy.

Nowadays establishment of state-owned entities within the non-oil sector would turn into the pushing force of the industry. This is due to the fact that it takes long time for the private sector to create the large company. Therefore the establishment of such entity in oil extraction, chemistry, machine production and electricity will be the optimal solution. In this case the application of optimal operational mechanism in these entities plays the important role. At the same time the possibility of weak justification of the decisions is high. Therefore participation of Ministry of Economic Development, Finance Ministry, and Industry and Energy Ministry is essential in such decisions. This committee should prepare the plan for such entity and submit for approval of Cabinet of Ministers. In our opinion, the corporative management in government organizations should be a benchmark private sector. The major problem of industrial companies is absence of planning. Increase the management level of the company requires the preparation of development plan. Such plan provides the opportunity to evaluate the management performance and gives the inputs for social economic development program. Nowadays the low level of corporate management limits such planning process.

Conclusion

Thus the process of industrialization shows that Azerbaijan is currently on the new development stage. Although oil sector gives significant impulse to the development of Azerbaijani industry, it could promote the development through provision of grounds for sustainable raw material supply, creation of large industrial complex and development of non-oil sector. During the recent years we observe the positive trends in development of machine construction, metallurgy, food and refinery industry, technology, chemistry complex and ore sector. If we pay attention to the structure of the industry we can see that although the portion of oil sector is still large, the growth rates of non-oil sector is high as well. The role of machine construction, metallurgy, chemistry industry in this process is high. In order to accelerate this process we should efficiently utilize not only the potential of the existing entities within the industry, but also create new ones, which will be based on new technologies and innovations. Therefore we believe that creation of conditions for increase of investments and investment demand each year is very important in this case. The major direction is creation of new companies and reconstruction of existing based on new technologies with application of local resources. Therefore we believe that restoration of entities within aluminium, steel, machine, equipment, electronics construction and food production industries as well as entities within the Azerkimiya group. The development of these entities

will support the economic development of our country and provides the grounds for manufacture of products which will be able to compete on foreign markets. These entities will also play significant role in creation of new working places. Establishment of industrial sector in Sumgayit, development of ore production in Dashkesan, Nakhchivan, Ganja and establishment of light industry in Shaki and other regions will make Azerbaijan the biggest industrial centre of the region. This will give strong impulse to the structural changes in the Azerbaijani industry; the last in its turn will give the opportunity for provision of internal demand and expansion of exportable goods, which will provide the grounds for flow of investment and currency to the country.

Formation innovation model of industrial policy, sub-models on regional, sector and entity level and their realization in mid-term perspective will provide the following results:

- ✓ Formation innovation model of industrial policy, sub-models on regional, sector and entity level will push the development of technical potential of the industry, especially in the regions;

- ✓ It will have the positive effect on competitiveness of national products both on local and foreign markets;

- ✓ It will create necessity for improvement of education quality, which in its turn will provide specialized personnel for the industry;

✓ In the country and especially in the regions where the policy was applied the high level and competitive work places will be created;

✓ Internal demand for the national products will increase and development of import substitute sectors in the country will commenced;

✓ The export-directed production will be straighten

✓ The Azerbaijani non-oil industry will go to the foreign markets and the same time it will have the access to the other raw material and other resources market.

All these factors will improve the industrial structure of Azerbaijan and at the same time it will increase the competitiveness of the products and provide the sustainable development of economy and improve the welfare of population in country.

References

- [1] Algebrova and others. State economic policy. Pub. "Delo i servis", 1998, p.320, C257.
- [2] The economic issues. 2012, №4, p.144)
- [3] John D. Deniels, Lee H. Radeba International business., 1994, p.164
- [4] J. Lamben. Market oriented management. St.Petersburg, 2004, p.800.
- [5] M.U.Rustamov. The concept of development of oil and oil-chemistry industry in Azerbaijan. Azerbaijan oil sector, №5, 2006.
- [6] M.Porter International competition. Competitive advantages of the countries. M.: international relations, 1993. P 896. p. 26.
- [7] The decree of the president of Azerbaijan Republic on "Rules of regulation of export-import operations in Azerbaijan Republic" dated 24 June 1997.
- [8] The law on "Anti-monopoly activity » of Azerbaijan Republic, article 8.
- [9] The decree of the President of Azerbaijan Republic on "The rules for utilization of funds of National Fund of Azerbaijan Republic on Enterpreneurship support" dated 28 December 2006.

- [10] The decree of the President of Azerbaijan Republic on “Measurement for acceleration of social-economic development” dated by 24 November 2003.
- [11] The decree of the President of Azerbaijan Republic on “The rules for utilization of funds of National Fund of Azerbaijan Republic on Enterprenuership support” dated 28 December 2006.
- [12] The law of Azerbaijan republic on “State register of legal entities and their registration” dated 12 December 2003 (article 8.3)
- [13] The State Program on development of small and medium business (2002-2005).
- [14] Azerbaijani statistics 2012. Baku. 2012, p-s 848, 447,448,449,450,451-452, 457,458,469,474,475.
- [15] International Financial Statistics Washington: IMF, 2006, c.68.
- [16] International Financial Statistics Washington: IMF, 2007, c.68.
- [17] Lal K. Almas, Nazim Uzbey Hajiyev Azerbaijan’s Current and Potential Comparative Advantage: An Exploratory Study. ecomod.net/system/files/nazimLKAecomod13.pdf