

**ДИВЕРСИФИКАЦИЯ НА ИКОНОМИКАТА НА АЗЕРБЕЙДЖАН:  
КАК ДА ПРЕМАХНЕМ РЕСУРСНАТА ЗАВИСИМОСТ?**

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**DIVERSIFICATION OF THE ECONOMY OF AZERBAIJAN: HOW TO  
OVERCOME RESOURCE DEPENDENCE?\***

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***Abstract***

*The diversification of the economy at resource-dependent countries is an important measure to reduce dependence on these resources. To this end, the state needs to implement policies to improve the business environment, determine the priority of industries, support and develop socially important industries and infrastructure. The purpose of the study is to justify the need to diversify the economy of Azerbaijan and determine its ways in order to reduce the dependence of the economy on oil and gas resources.*

*The results of the research show that in order to avoid resource dependence, it is necessary to determine the non-oil export potential and priority industries. In the condition of a low exchange rate of the national currency, it is necessary to create a favorable business environment for the production of import-substituting products. An important role is assigned to institutions in the successful implementation of the diversification of the economy.*

**Keywords:** *resource dependence, economic diversification, oil and gas resources, the economy of Azerbaijan*

**JEL Codes:** *Q32, Q38, P28*

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## **1. Introduction**

In modern conditions of development of post-oil economy of Azerbaijan there is still the urgent of the further implementation of structural reforms in industry, the diversification of the economy, a departure from the oil sector. As a result of reforms of modernization in certain sectors of the mining and processing industries, as well as in the

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production of information the more modern technology have been used. Through the introduction of innovative processes the sectorial structure of industry began to change, and the non-oil sector of the economy started to develop.

The implementation of an effective policy of the industry diversification is greatly affected by the development of institutional relations. At this stage of development of the Azerbaijani economy the institutional relations are considered more important. Factors such as the transformation of property rights and the associated privatization of industrial facilities, restructuring of individual enterprises, the increasing complexity of the economic performance of the process cause the relevance of the institutional arrangements. The further diversification of the economy is closely bind with the reforms in the institutional sphere. The efficiency and stability of the state functioning ultimately depends on that how well the existing institutions operate.

## **2. Literature Review**

The issues of structural change in countries with abundant natural resources have been investigated by many scientists: Callen, T., Cherif, R., Hasanov, F., Hegazy, A., & Khandelwal, P. (2014), Esanov (2008), Gelb (2010). The need to diversify the economy to overcome the "curse of resources" is found in Collier (2007). The link between diversification and institutional factors, the dependence of the successful implementation of diversification from institutions is reflected in the work of Mehlum H., Moene, K.O., Torvik, R., (2006). Among Azerbaijani scientists involved in diversification issues, Aslanli K., Ismayil Z., Aghayev R. and Mehtiyev A. (2013) and their joint work - "Assessment of economic and export diversification: Azerbaijan" should be noted. However, they investigated only the diversification of exports. The problems of diversifying the economy of Azerbaijan were also investigated by Ahmadov (2017). The issues of studying the main directions of the diversification of the Azerbaijani economy require the further research.

## **3. Methodology**

The research covers the period of 2010-2016, in some cases dynamics from 2013-2016. The research is restricted to the analysis of industry of Azerbaijan. The information compiled by State Statistical Committee of The Republic of Azerbaijan, Ministry of Economy of Azerbaijan Republic, scientific publications of foreign and national researchers, and have been used for the purpose of the study. The research is based on the descriptive method, methods of analysis and synthesis are used to study the problem elements.

#### **4. Problem statement and research objectives**

Diversification of industry supposing the reducing dependence on raw materials, the development of industries with high added value, the creation of high-tech industries is a key priority for the development of the economy of Azerbaijan. According to most scholars, the implementation of industrial diversification policy is firstly required for the countries with rich natural, especially fuel and energy resources. This is particularly necessary in the case of the predominance of raw materials in the GDP of the country with a weak development of agriculture, tourism, services, low level of development of social consumer goods production.

The main advantage of the diversification of the industry is the independence on one industry. If there are problems in the sector or on a particular market, the result is not to lead to a decline in the economy in general. Due to the diversified industry a country shows less dependence on environmental factors, it becomes less dependent on imported products. This is caused by the fact that, due to more sustainable inter-sectorial linkages occurring as a result of the diversification the domestic demand for the products is formed and developed (Shediac, R., Abouchakra, R., Moujaes, Ch.N., & Najjar, M.R., 2008).

The research objective – to issue the necessity of diversification of economy. It can be summarized as follows:

1. Diversification prospectively is in the long term plan. The main feature of the diversification of the industry despite the fact that a number of large-scale reforms is implemented at the moment, but the result, the impact of the reform does not take place immediately but rather distant future. However, despite the time lag between the conduct of the diversification and efficiency of this process, the impact of diversification will cover a long period of time. Direct public investment in various sectors and industries lead to the stimulation of entrepreneurship, activation of this process. The result is stronger and inter-branch relations, providing the conditions to increase the export potential, the access to international markets. All of the above may result in improvement of the social welfare of the population in the future.

2. In resource-rich countries, the rate of extraction of natural resources is lower than the population growth rate. Thus, in such countries, the capita income is gradually reduced, the life level falls down. Also, it should be noted that the specificity of the oil industry lies in the fact that it does not contribute to an increase in employment, the discovery of a large number of jobs. This, in turn, contributes to the emergence of the threat of violation of social stability, which ultimately can lead to economic and social crisis.

3. The world prices in the international market cause the dependence of the exporting countries with the rich natural resources. The volatility factor comes into force here. This is due to the fact that high commodity prices generate a temporary economic

growth, a fall in prices as a sharp downturn in the economy. Azerbaijan, as an exporter of natural resources, is highly dependent on oil price fluctuations on the world market. Pricing policy changed dramatically, despite the fact that very often there are agreements on prices between oil-exporting countries. An example is a situation occurred in Azerbaijan in 2015: as a result of the avalanche of falling prices on the world market the price for the Azeri Light crude oil fell down more than 3 times. Subject to having a developed financial system, such risks may be insured against.

4. The possession of abundant natural resources is a plus for any country, an important competitive advantage over other countries, despite the concept of a "resource curse". Such important competitive advantage shouldn't be given up, it should be used correctly by diversifying the economy.

## 5. Key results

The degree of diversification of economy of Azerbaijan may be estimated by analysing the structure of the gross domestic product (GDP) and commodity exports (see Table 1).

*Table no. 1 – The GDP Structure in the Oil and Non-Oil Sector of the Economy, mln. Manat*

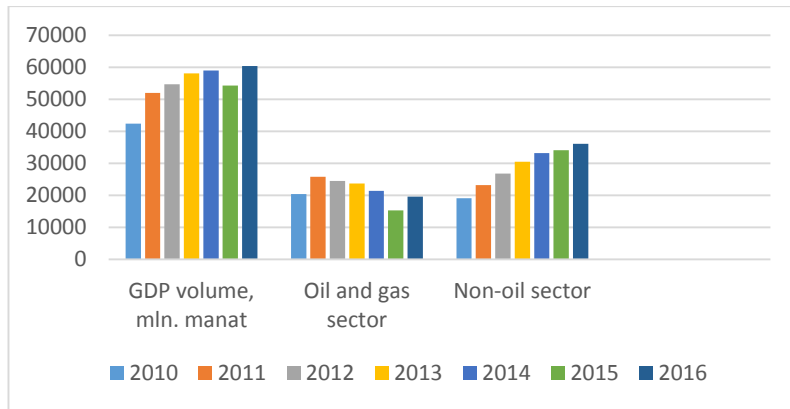
	2010	2011	2012	2013	2014	2015	2016
GDP volume, mln. manat	42465,0	52082,0	54743,7	58182,0	59014,1	54380,0	60393,6
GDP growth rates, %	105,0	100,1	102,2	105,8	102,8	101,1	96,9
Including:							
Oil and gas sector	20409,5	25829,9	24487,3	23778,1	21405,2	15382,2	19648,9
Growth rates, %	101,8	90,7	95,0	101,0	97,1	100,6	100,1
Non-oil sector	19179,0	23196,1	26864,4	30525,9	33195,9	34138,8	36153,5
Growth rates, %	107,9	109,4	109,7	109,9	107,0	101,1	95,6
Net taxes on product and import	2876,5	3056,0	3392,0	3878,0	4413,0	4859,0	4591,2
Growth rates, %	107,6	108,3	106,9	108,5	104,9	103,7	95,6

Source: State Statistical Committee of The Republic of Azerbaijan (2017), National Accounts of Azerbaijan, Statistical yearbook, p. 17.

The following table shows the analysis of the GDP structure in oil and non-oil sectors of economy of Azerbaijan in 2010-2016. The data show that the GDP rate is growing from year to year. During the study period, the maximum value of the oil and gas sector in the total GDP was achieved in 2011, thereafter the share of the oil sector began to decline gradually. The share of non-oil sector in the analysed period is gradually

increasing. Thus, in 2010-2016, the share of non-oil sector in GDP increased by 1.88 times. The table data can be represented as a graph:

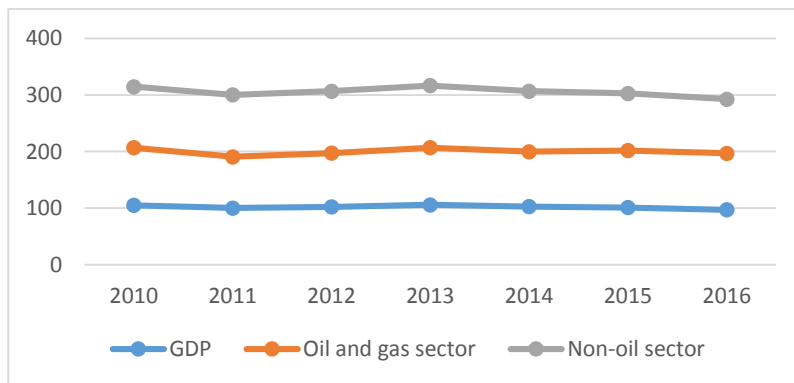
*Figure no. 1: Dynamics of GDP In Oil and Non-Oil Sector*



*Source:* State Statistical Committee of The Republic of Azerbaijan (2017), National Accounts of Azerbaijan, Statistical yearbook.

The diagram shows the GDP growth in the country during the period under review, and a parallel increase of the non-oil sector share. Based on the data, it can be argued about the positive changes in the diversification of economy of Azerbaijan: since 2012 there is a decline in the share of the oil and gas sector in GDP and a continuous increase in the share of non-oil sector.

*Figure no. 2: The growth rates of GDP in the Oil and Non-Oil Sector, %*



*Source:* State Statistical Committee of The Republic of Azerbaijan (2017), National Accounts of Azerbaijan, Statistical yearbook.

Due to the fall of world oil prices and the devaluation of manat, the GDP growth rate in the country has slowed down since 2014, which has negatively affected the growth rates of the non-oil sector. If in 2013 the growth rate of the non-oil sector was at the level

of 109.9%, in 2016 it was only 95.6%.

Starting from 2015, the volume of investment from all sources tends to decline. In 2016, the volume of investments in the economy of Azerbaijan decreased almost 2 times as compared to 2014, and amounted to 14228 mln. dollars (see Table 2).

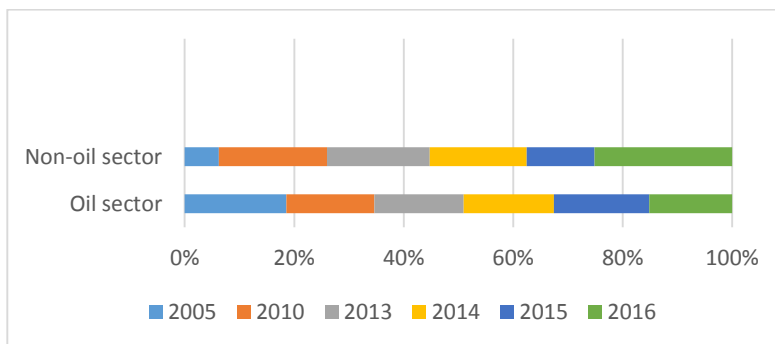
*Table no. 2 – Investment directed to economy (mln. dollars)*

	2005	2010	2013	2014	2015	2016
Investments by all sources	7118,5	17591,4	27340,0	27907,5	19547,2	14228,0
Internal investment	2225,3	9343,6	16799,1	16209,8	8828,1	4066,9
Total foreign investment	4893,2	8247,8	10540,9	11697,7	10719,1	10161,1
of which:						
Financial credits	698,4	3405,9	2655,8	1880,6	2210,2	2197,8
Direct investments	4030,4	3614,9	5976,2	8049,2	7483,1	7323,6
of which:						
Oil sector	3799,9	2955,3	4935,2	6730,7	6622,7	5617,4
Non-oil sector	230,5	659,6	1041,0	1318,5	860,4	1706,2

Source: State Statistical Committee of The Republic of Azerbaijan (2017), Statistical Yearbook of Azerbaijan, p. 409.

Since 2015, the volume of foreign investment in the economy has outstripped the volume of domestic investment. The increase in foreign investment is primarily due to the implementation of oil and gas projects, and the decrease in the share of domestic investment is due to the devaluation of manat.

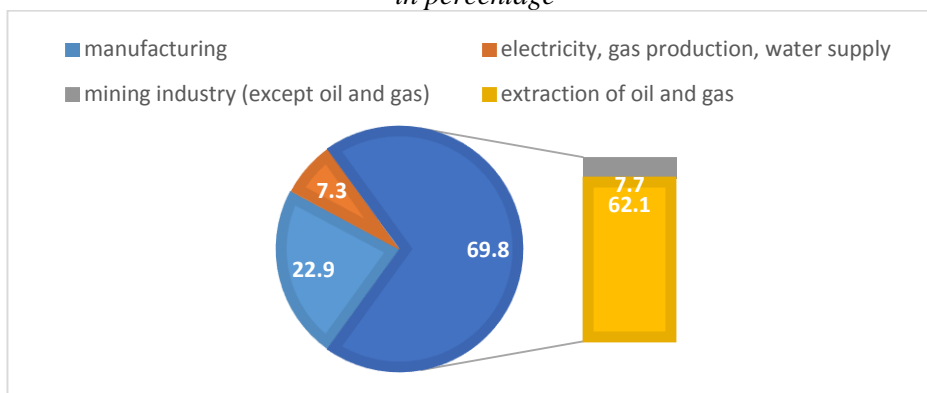
*Figure no. 3. Foreign direct investments to oil and non-oil sector of economy*



Source: State Statistical Committee of The Republic of Azerbaijan (2017), National Accounts of Azerbaijan, Statistical yearbook.

The share of foreign investments in the oil sector is decreasing from year to year. Of the foreign direct investment in 2016, the share of the oil sector accounted for 76.7%. For comparison, in 2015 its share was 88.5%.

Figure no. 4. Sectoral structure of industry in 2016, relative to gross total, in percentage

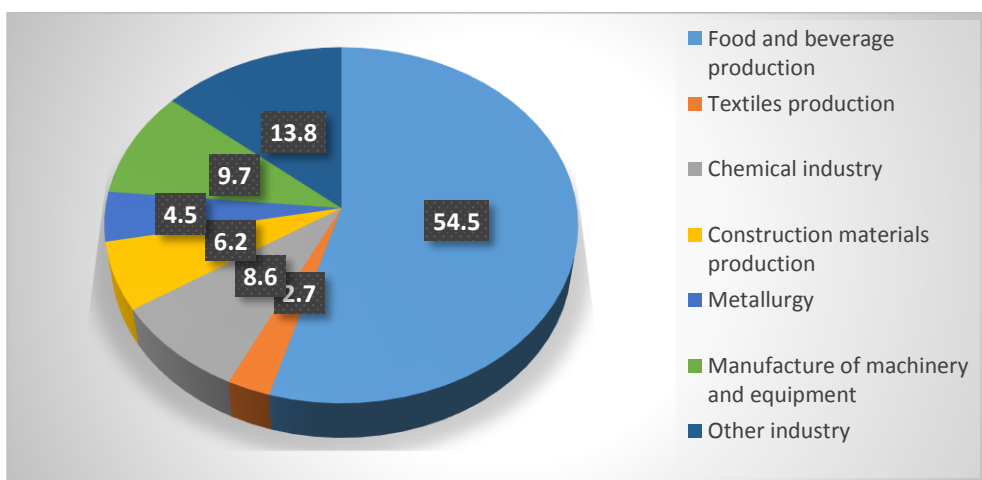


Source: Ministry of Economy of Azerbaijan Republic, (2017), <<http://economy.gov.az/article/2016-senaye/23003>>, 17.02.2018

The predominant share of industrial production in Azerbaijan falls to the extractive industry. If the share of the manufacturing industry in 2016 was 22.9%, then the specific weight of the extractive industry was at the level of 69.8%. 62.1% of the extractive industry was accounted for oil and gas production.

The structure of the non-oil manufacturing industry in 2016 presented in the Figure 5.

Figure no. 5: The Structure of the Non-Oil Industry in Azerbaijan in 2016



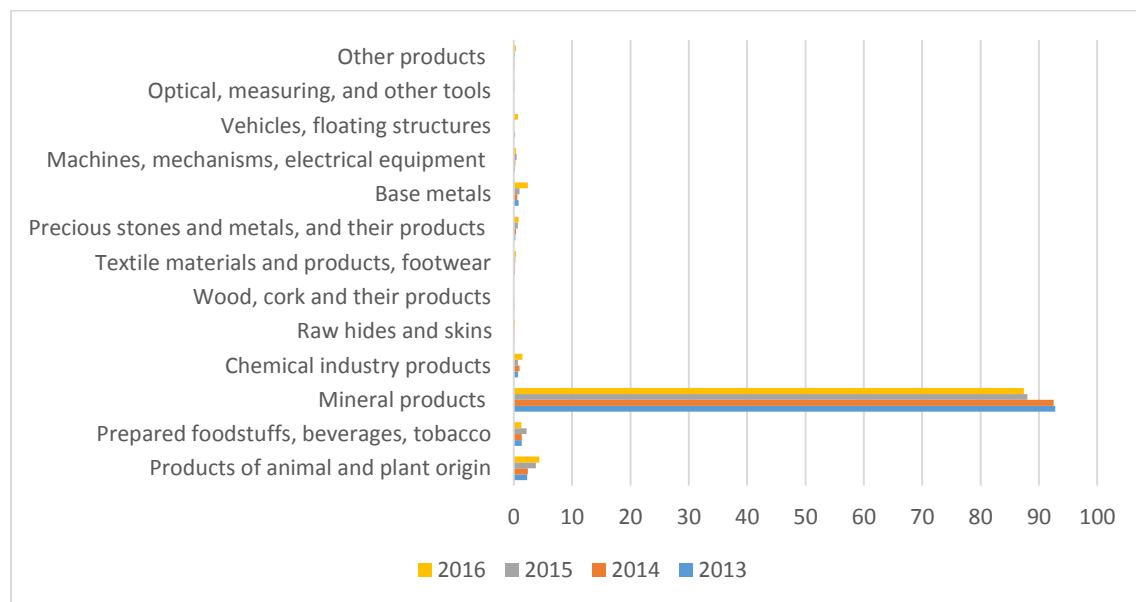
Source: Ministry of Economy of Azerbaijan Republic, (2017), <http://economy.gov.az/article/2016-senaye/23003>, 17.03.2018

The structure of the non-oil manufacturing industry, as shown below, reflects the

degree of diversification of industry in Azerbaijan. According to the figure, the prevailing part of the manufacturing industry falls to the share of the food industry - the manufacture of food products, beverages and tobacco. The share of this sector is greater than the percentage of a set of specific weights of all other industries of the manufacturing sector and the non-oil sector of industry, and it was about 54.5% in 2016. Of course, the development of such socially significant industries as food industry is a plus for the economy of any country. But along with this industry it is necessary to develop high-tech industries such as the manufacture of machinery and equipment, manufacture of electrical equipment, with the total specific weight in the total non-oil sector of industry counting to 9.7% in 2016.

The analysis of commodity exports on the basis of comparable international data allows to better identify the level of competitiveness as countries export the goods produced in sectors where they have a comparative advantage (see Figure 6). The prices for the exported products are set in world markets and less prone to distortion.

*Figure no. 6: The Structure of Commodity Export of Azerbaijan in 2013-2016*



Source: State Statistical Committee of The Republic of Azerbaijan (2017), The foreign trade of Azerbaijan, Statistical yearbook, 65-70.

Overall, the data indicate a strengthening dependence of Azerbaijan on oil and gas revenues as a result of rising oil prices in recent years. In 2016, 87.4% of the total exports of goods falls to the mineral products. However, the share of manufacturing exports and agriculture remains low. It may partly reflect the temporary impact of the global



economic crisis, which led to a decrease in the volume of the world trade and industrial production. But, unfortunately, the figures show that in recent years Azerbaijan has not made great strides in diversifying industry in terms of the development of processing industries.

In general, the availability of raw materials provides significant opportunities for development - it is the influx of foreign investments into the country, and the growth of foreign exchange reserves. However, over the longer term the economic growth weakens in the resource dependent countries.

In the countries with rich natural resources, academic economists found a negative relationship between the abundance of natural resources and rapid economic development. They coined the term "natural resource curse" in order to explain this situation. That is, the presence of rich natural resources is not good for the country, and turns into a "curse" - the reduced rates of economic growth, there is macroeconomic instability, rising unemployment in the country.

In the economic literature there are two ways to deal with "the curse of natural resources". Firstly, it is the accumulation of oil revenues coming in the form of foreign exchange reserves, or in other words, in the form of sovereign wealth fund. Secondly, it is to create favorable conditions for the implementation of institutional policies (Gelb A., 2010, p.8).

The first method of dealing with the "resource curse" is successfully implemented in Azerbaijan through state oil strategy being implemented since 1994. In order to develop the rational use of the mechanism of income received from oil and gas production there was established the State Oil Fund of the Azerbaijan Republic in 1999. The State Oil Fund of the Republic of Azerbaijan accumulates the funds from the sale of oil and gas, which is released in the future to address the vital economic and social problems of the country.

As for the second instrument - the creation of institutions, the most progressive of the institutional system (here it means the modern system of social control, the achieve of transparency of public authorities, the development of economic infrastructure, related to the protection of property rights, improvement of fiscal policy and the creation of conditions for the development of market relations, free enterprise), it is still in the formative stage (Esanov A., 2008, pp.7-8). For the purpose of diversification and competitiveness of the economy in the country has been approved and successfully implemented by the State program on development of the industry in the years 2015-2020, the Concept "Azerbaijan 2020: vision for the future."

## **6. Conclusion**

The economic diversification is a priority for the economic policy of Azerbaijan.

The announcement of 2014 as the Industry Year by the President of Azerbaijan also shows the revision of the economic policy, the transition from raw materials to a diversified model of development.

The simultaneous implementation of a policy of diversification of industry, on the one hand, and reducing the country's dependence on raw materials, on the other, is a difficult task. The oil sector is very weakly linked to other export sectors in terms of technology and the skills used. In addition, the implementation of the diversification of the economy is quite a long time process that requires considerable financial investments. But in general, the world experience confirms that despite of difficulties the resource-dependent countries are able to diversify the economy by investing primarily in human capital (health and education) and infrastructure, supporting financial institutions, supervising the proper distribution of revenues from oil to other sectors and providing transparency of the stabilization funds. These measures help to raise living standards and to support the development of the private business sector.

The great importance is given to the successful diversification of institutions. The foreign experience shows that the quality of institutions is one of the fundamental factors in increasing the exports of the processing industry with high added value goods and foodstuffs. The institutional reform in the country can be contributed by the growth of the middle class and unfolded in the world of competition between the major new markets. The successful implementation of the diversification policy needs innovative, the so-called "creative" modernization, based on the creative innovative developments not only in economics but also in politics, science and education, in the social sphere, culture, and the introduction of such developments in the social practice (Aslanli K., Ismayil, Z., Aghayev, R., & Mehtiyev, A., 2013, p. 43-44).

The diversification of the economy of Azerbaijan should be focused on the development of high performance industries, and include the following:

- the direct investments in education, including science and technology, technical and vocational education;
- the development of certain sectors and non-extractive industries;
- the investments in infrastructure and strengthen institutions in order to reduce the cost of doing business (including business through free trade zones);
- supporting entrepreneurship and innovation through improved access to information and communication technologies, the increase of charges for scientific researches (Callen T., Cherif, R., Hasanov, F., Hegazy, A., & Khandelwal, P., 2014, p.25).

For the implementation of further structural reforms in the economy, an effective diversification of the corresponding industrial policy, existing financial institutions, as well as the achievement of greater transparency and accountability in public expenses is required.

The industry branches elected by the government for the purpose of diversification policies should have an attractive structure. This indicates that the "attractive" structure should provide a competitive advantage. As long as this condition is not satisfied, diversification will not lead to the achievement of high profits.

The world experience shows that it is difficult to diversify the economy in the countries with natural resources. The main directions of diversification are: focus on investments in human capital, the creation of the creative class, investment in infrastructure, development of financial institutions, the establishment of stabilization funds for the effective distribution of income from the export of raw materials in all branches of the economy. The process of creating institutions in resource-rich countries is long and difficult, but this is the only way to succeed in diversifying process.

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