

**The Ministry of Education of  
Azerbaijan Republic**

**Economic diversification in Azerbaijan**

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## **Abstract**

All of the countries in the world have specialized on one or several sectors in economy depending on the country's level of development, resource allocation and some external factors. All these factors made critical changes and transformation in the economies. Economies have shifted from traditional, resource-based economy to more productive and less volatile one. Over the time on the way of economic development countries have tried to make their economies less volatile to internal and external changes, that is why they diversified their economy to find out which sector would be more attractive and perspective to grow up and concentrate. Of course, diversification approach in the economy is different in developing and developed, resource rich and resource poor countries.

This article analysis economic variables both in developing and developed countries, past diversification experiences of given countries, main directions and main factors which may influence countries' diversification policies. It summarizes ways of reduction in dependency from single sector economy and get more adaptable and less volatile economy. Additional tables and figured data will help to analyze the effects of diversification in gross domestic product and the changes in economic structure and contribution to the economic growth.

Additionally, research proposal indicates main challenges and opportunities for countries during the diversification process. It gives detailed view of diversification strategy in Azerbaijan from oil-gas sectors to other non-oil sector.

regions in Azerbaijan. Mixture of different countries' rural policy experiences is demonstrated in various graphs and tables.

# 1. Literature review

## 1.1. Introduction

One of the most important target of the nation is getting sustainable economic stability. By getting sustainable economic growth, country is able to enhance growth in welfare and living standards. Stability of economy depends on various factors. Diversification of economic activities and sources of income flow to country are considered for the base of sustainability in the economy. Past experiences in the nations` economic history have proved that diversification in the economy improve range of sources, reduce dependency on a few sectors and play as a guarantee for the sustainable long-term growth.

Surely, economies have clear targets: sustainable economic growth, increased productivity, enhanced efficiency, fair reallocation of resources. Economic fluctuations created new phenomena which is called diversification. Diversification is not new idea. All the countries somehow diversified their economies decades ago, because it was need. Global economic crisis showed that a dominant sector dependent economies have suffered a lot when crisis reached to this single sector. If we look through developed countries it is easy to observe that they have implemented successful diversification strategies.

Diversification is mitigation of risks which can have significant effects on economy. It is hot policy area in developing countries, because most of the poor nations try have transformation and structural changes in the economy in order to reduce the volatility of income sources from external and internal based fluctuations. Here there is positive correlation between long-term economic development and diversification. It can be achieved by structural changes in employment, or enhanced investment flow to different sectors.

Developing countries` economies are characterized by highly dependent on primary sector (agriculture and mining), however developed countries are mainly focused on secondary (production and construction) and tertiary sector (tourism and service). Small proportion of this primary sector is more than enough in most of the cases for developed countries as a result of higher productivity. Other sectors have more potential for future growth and contribution to the creation of gross domestic product. It shows that these developed countries have already experienced the effect of diversification in their economy. Nowadays, main challenging point belongs to developing, especially resource rich countries.

Without diversification, depending on single or few sectors in economy is like “keeping all the eggs in the same basket”. This excessive dependency is mostly found in developing resource-rich countries. Especially if these countries have few commodities for export, or few trade partners it makes diversification as a must.

Diversification is defined as healthy and flexible economy. Well-diversified economies tend to be efficient in several sectors, which can lead for increased productivity and income level. It is crucial in, particularly resource rich countries. If there is decline trend in global market share of traditional export market may decrease, where as this decrease can be compensated by other sectors` export. Result is less influenced gross value, because other sectors play as a role of guarantee for the economy through providing new opportunities and well-balanced structure.

Contemporarily, modern technologies reduced transportation cost and countries are able to export their products cheaply, which means increased efficiency, expand the range of export-oriented products in the world market. Diversification does not happen only in export-oriented fields, but also import substitution is as important as export. Because it reduce capital outflow and provides competitiveness for domestic market.

Dutch disease as one of the brightest example can explain how less diversified economies can be affected by the shocks during critic times. Dutch disease determines that one sector-based economies can experience high growth in this sector, while stagnation or low-level growth in other fields. If country do not pave the way for diversification through using the revenue to increase competitiveness of these other sectors, they may face by drastic decrease when dominant sector declines.

Improvement in private sector, attracting foreign direct investment, structural changes in employment, transformation of sectoral development may result diversification. Improvement and special attention for the development of several sectors can influence in a great deal to the labor market. More people will be involved in various economic activities. Increasing level of domestic and foreign direct investment can improve infrastructure. Newly developing sectors will increase the need for special skilled labor force, which can enhance the level of human resource capital.

Statistics data makes it possible to compare the degree of efficiency of diversification. The result can be illustrated by the growth in GDP, changes of

primary, secondary and tertiary sectors` share in GDP, sustainability and competitiveness of diversified sectors in the global market, shift from traditional to newly developed sectors. Countries` which have open trade operations in global market

Of course, for getting all these mentioned goals countries should determine clear pattern for the implementation of long-run policies. Initially, it should be determined in which field country has comparative advantage and which sectors have more potential for the growth of income level and GDP, which policies are needed to improve these sectors, which sectors should be chosen for investment purpose and what can be economic cost of diversification.

Most of emerging countries all over the world have already started using past experience of developed countries in their economies. Because, the effects of diversification are undeniable and visible. Transformation of economic sectors is just a way of getting sustainable economic development. Countries should make special efforts to get full effect of diversification.

## **1.2. Concept and theoretical basics of economic diversification**

According to the United Nations diversification is implementation of set of methods and strategies for getting sustainable economic development. Which means all the implemented policies serve for economic growth by the development of various sectors in the economy. In another word, it is broadened range of activities in economy to stabilize the whole economic system. Diversification is like insurance for the economy protecting against other changes and volatilities. These uncertainties are too much if the economy does not have any tool as a buffer for external influences.

In fact, there are some distinguishing differences between economic development and diversification. Economic development is the last result of all the realized current actions, keeping the strategies and structures same, whereas in diversification economy faces with significant changes both in structure and ways of policy implementation.

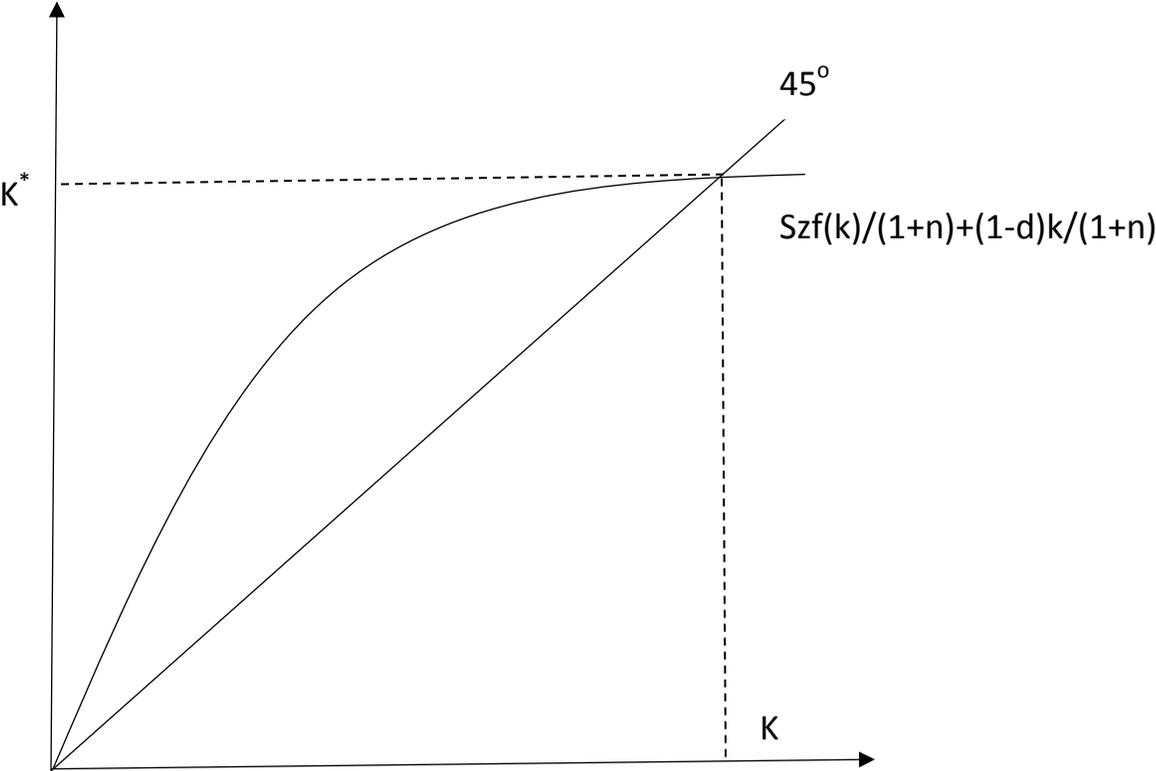
When it comes to diversified economy, it departs economy from current or traditional trend to another side which help economy to avoid uncertainties and mitigation of risks. Another direct and indirect effect of transformation is increasing level of competitiveness within sectors, increasing productivity and income level, reduced unemployment and poverty. Improved opportunities give the chance to people to set their businesses, gain new skills, reduce operation (production, transportation) cost

However, there are dozens of benefits and advantages of diversification, some policymakers are oppose to the above ideas and claim that this process cost economy in a great deal. Cheembo explained that this process creates additional complexity, difficult structure for the economy. Additionally, it is time needed and costly if it is realized (Chembo, 2013). OECD also indicates that it would be less reliable and less efficient process if governments fail to determine the path to follow and if policy makers neglect former policy makers` long-rung development in order to gain short term benefits. Scarce resources have to be diverted to sustain the whole economic system. If there are still uncertainties in determination of base for the model, countries will not be able to gain full benefits of diversification and waste economic resources.

According to the Solow growth model, future growth of capital per unit of labor market depends on the previous performance or capital of labor market unit.

Depreciation rate, saving rate, implementation of technology in production and growth rate of technology definitely influence on growth of total output. Solow explains that total output in economy depends positively on saving rate and growth in technology and negatively on depreciation and population growth rate. When population increases output per capita decreases, when saving rate goes up, future consumption will increase, which means total increased GDP output.

Graph 1. Solow Model



Here  $K^*$  is capital per worker in the future,  $K$ - capital per worker today,  $S$ -saving rate in the economy,  $Z$ - growth of technology and  $n$ -growth rate of population.

However, there are several factors contributing to the efficiency and effectivity of diversification, but the main factors are having well-functioning governance, private sectors and better reallocation of resources. Encouraged private sector and good governance are stimulations for economic diversifications. If there is good governance within state, it will create better business climate for the growth of private sector through providing better policies and institutional framework. Because in today`s economy private sector is backbone of the economy. Private sector`s development leads increasing efficiency and productivity within sectors

using economic resources effectively. There should be interconnected partnership between government and private sector- initiatives and encouragement to private sector (Diarra, Guria, 2011). When it comes to another factor-natural resource, the effect of this factor for sustainable economic growth in several countries is a bit complicated. The main reason here is government institutions` failures in resource management and revenue management. When governments fail in provision of diversification in trade and resource management, then any endogenous effect may catalyze economic decline.

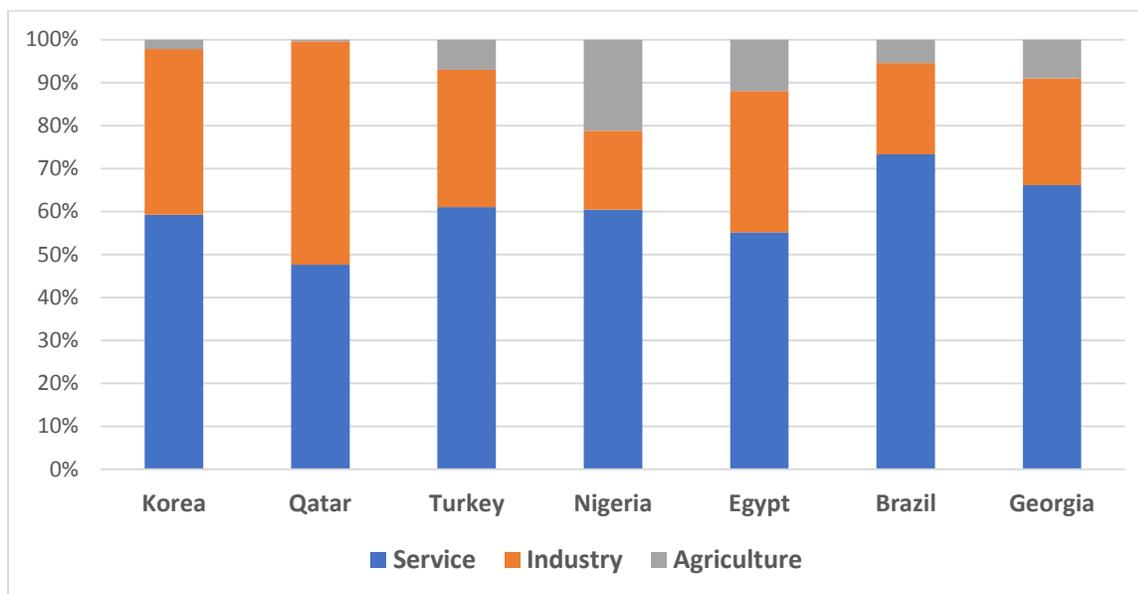
According to structural economic development models, enhanced economic growth can be achieved by the structural change in the export from primary sector to other structural forms (Chenery, 1979). Until today most of the highly emerging and developed countries have experienced this transformation in their economy, that is why manufacture and service trade account majority share of their export. Main argument here is extreme fluctuated commodity market prices, which makes countries to focus on export commodities diversification to keep stability in financial portfolio. Diversification of export can have spillover effect on other sectors. It should be seen as a chain, which all the sectors within economy are interlinked. Growth in one sector will definitely affect on another sector and this process continues step by step.

Diversification is catalysator for specialization in different sectors. According to Richardian model reduction in transportation cost may decrease dependency for a sector from single market, that is why participant tend to integrate other markets. Improvement in technology stimulate market players to expand their area, create new opportunities for other sectors.

Determination of level of diversification in the economy is another difficult issue. One way to measure it is looking through the change in the composition of export over the years, how important is service and manufacture industries in the whole economy. Second way is measuring the share of sectors in nominal gross domestic products. And the las way is thought transformation in the labor market involvement structure- which proportion of labor market is involved in which market.

The change in the share of sectors in GDP differs country by country. Because of policies diverted to increase more competitive sectors, this proportion may differ.

**Figure 1. Sectoral value added in 2016 (% of GDP)**



Source: [www.theglobaleconomy.com](http://www.theglobaleconomy.com)

If country's export mainly depends on a few products and share of secondary and tertiary sectors is small, then this economy can not be considered as well-diversified. For example, in Russia (2011) 5 product categories accounted nearly  $\frac{3}{4}$  of total export. Today's "Korea miracle" is a result of transformation of economy. After the Second World War, for example, Korea has started for implementation of economic, structural policies which has played vital role to tackle with bad economic condition during this time. As a part of policy, government diverted foreign investment and foreign currency flow to weak but potentially powerful sectors, such as chemical industry, building big infrastructures (shipbuilding, ports, chemical industries, export-oriented manufacturing complexes). Share of agricultural employment decreased from 63% to 7%, total export increased from about \$40 mln to \$559 bln between 1960 and 2014.

All these data prove again that diversification can contribute to the whole economic growth. Diversification in economies are divided into 2 categories: horizontal and lateral diversification. In horizontal diversification small sectors with small contribution to the whole economy are chosen for focus group. They are stimulated for getting bigger in importance. For instance, however some Gulf countries do not have much land resources for development of agriculture they

have built big plans to reduce dependency from oil industry and develop agrarian sector.

The second approach is lateral diversification, which prepares economy for the future development through growth in the sectors that are not exist currently. It is complete change for economy, needs great efforts, but in most of the cases output is economy shaping. For instance, transformation of agricultural sector-based economy to service sector-based economy is dramatic change in the economic structure by omitting manufacturing industry level.

The following points summarize benefits of diversification for economy:

- Reduced dependency on a single sector export:

Development of several sectors can reduce dependency of economy from income flow from single direction. These developing sectors can turn into export oriented. In both way, even if this sector has no advantage when it goes to global market, it can substitute import.

- More adaptable market structure:

Market is getting more adaptable and responsive for any instant changes in the global and domestic market. Crisis in certain commodity markets does not influence significantly. Total economic growth is compensated by the growth in other sectors.

- Mitigation of exogenous risks:

Exogenous risks can be derived from trade partner, domestic factors, global market. These risks are dealt with appropriate tools. Diversification shares the power of economy among other sectors and reduce the risk of decline in the whole economy.

- Attracting domestic and foreign direct investment:

Development in different sectors is lagged by investment. If these sectors have future perspectives, public and private sectors both in domestic and foreign market tend to invest to gain long term benefit from these sectors. Of course, both parties are interested in increasing this mutual benefit. Especially, harmonization of policies for investment attract other market players to the field.

- Increasing productivity and efficiency of sectors:

Increasing production level (economy of scale), reduced production and transportation cost, increasing skill level in labor market, bringing new technologies and know-how will definitely contribute to the productivity.

- Increasing employment, diminishing unemployment and reduce poverty:

Development of primary, secondary and tertiary sector will create new opportunities for labor market. Skilled and semiskilled people can shift from traditional sector to new fields of employment. Especially, in developing countries most of the people are involved in traditional-agrarian sector. However, this sector plays vital role for employment in developing regions, but its capacity is not so enormous to obtain full employment. In this case labor market needs new opportunities- diversified new sectors.

Decline in unemployment means, at least people are involved in various activities to have stable income. In any way diversification of these sectors gives reduction in poverty level.

- Increasing skill level in the sectoral labor market:

Transformation of economic sectors leads for transformation in labor market structure. Increasing level of skills open new challenge for people to use their skills in different sectors. Most of the developed countries have experienced similar labor development patterns: labor market shifted from agrarian sector to manufacturing and then to service sector. Depending on labor markets` development they will follow the same patterns.

- Increasing total output and per capita income:

There is strongly positive relation between total output and degree of diversification. When sectors within economy expand their capacities total output of economy tends to growth through growth in productivity and efficiency. These new sectors start to contribute to the economy. Overhead output and per capita income increase.

## **2. Future opportunities, challenges and positive experiences of economic diversification in different countries**

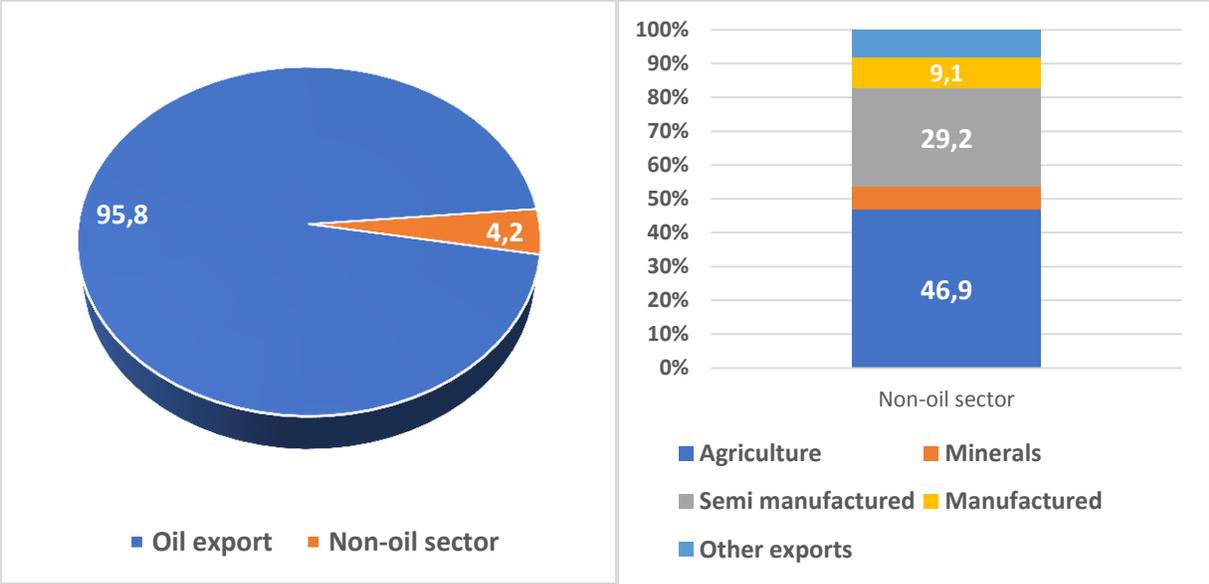
### **2.1. Opportunities and challenges for economic diversification in resource rich countries**

Previous researches about the linkage of abundance and economic growth have shown some interesting results. Experts think that however there is positive relationship between increasing output in specific sector and resources which trigger the growth of this sector, whereas negative aspect of being dependency and volatility of economy is also triggered by the same abundant resources. In another word for sustainable economic growth, cons of big volume of resources (negative affects) overcomes its pros (positive affects). Based on neoliberalist point of view, it is said that natural resources are the base for the growth of industrial sector. If resources are used in due, it will play the role of additional fund for the growth of other sectors and will be used to meet market demand. Development of non-resource based industries will be triggered by out sector forces. For example, which has occurred in Australia (mining industry's growth) or Canada (range of natural resources for industrialization).

After 1980s, some economists gave skeptical opinions on the importance and role of natural resources for sustainably increased economic output in the long-run. They have based on the "Dutch disease" to explain the possible effect of founding economic growth on resources. When resource extraction growth, it becomes more relevant for labor market. Labor market shift to the growing sector and leaves other industries, including agriculture and service sectors, and it increases unit labor price in the remaining sectors deliberately. However these sectors are not export oriented, increased labor unit cost influences on unit output for domestic market and this sectors become less competitive in the global market. This is one of indirect effect on other sectors. Even if country does not face with any scarceness of resources, other sectors' output decline and economy is getting more dependent on the single sector. It is also obvious that the only negative side of less diversified economy is not high risks of dependency in few sectors, also it leads for low

attention for the institutional base, structure of spending derived from natural resources, technical and human resource management aspect of institutions.

**Figure 2. Sectors` contribution to the Nigerian export in 2011 (%).**



Source: Central Bank of Nigeria - Annual Report

Gelb, Sachs and Warner have analyzed some resource rich countries and came to the idea that resource abundant countries experience slow economic growth in compare of other countries with limited resources. During the global commodity market crisis volatility of resource prices cost much for the whole of economy. Some countries, including Brazil, Mexico, Bostvana have experienced significant development in terms of diversification and they became less sensitive for external shocks. This is what diversification offers for economy- less volatile export and long-run sustainable economy.

Especially in developing countries private sector leading economic diversification is vitally needed. In these nations income per head is low, and it is fact that diversification fuels growth of income per capita. In today`s interconnected global economy it is nearly impossible to get rid of low or stagnated growth of economy, high poverty and unemployment without being a part of global economic value chain. Diversification in this point of view is foundation of range of international trade activities and provision of competitiveness of domestic economic activities in the global market. If the economy is based on extraction of natural resources it is more difficult to have sustained growth on economy through trade. Because

demand for these commodities always changes, and this fluctuation directly influence to this resource reach countries.

The question on the ways and range of opportunities for diversification is quite complex, because variables and their effectivity changes depending on countries. In resource rich countries main purpose is reallocation of benefits from resource concentrated economy to other- poverty, unemployment, export related other sectors. Sustainable development is based on these arguments. However, there are some difficulties for these economies to diversify, there are dozens of factors which enable diversification happen, such as strongly connected emerging world economy, advancement in technologies and innovation, increasing skill level, demand for goods and services. These are factors which result in diversification, but also there are some positive outputs of diversification, including reduction in poverty, unemployment, volume of imported goods (import substitution), increase in employment, volume of export, foreign direct investment, implementation of new technology in process, new units of infrastructure and so on.

The following basis should be met to stimulate diversification:

- Relevant stimulative policy framework:

Reforms in economic field to create appropriate level incentives for business environment, analyzing local and foreign market trend to explore endogenous and exogenous factors and then removing uncertainties occur in export and import processes. It serves for foundation of more competitive domestic goods and service market (includes different means of service, such as, utilities, transport services, financial).

- State investment policies in order to diminish costs:

As mentioned in Korea case, market players have got new opportunities after government's trade and investment policies which was driving factor to lower trade and logistics costs. In this case investment policy both increase productivity and level of implementation of new technology, advanced management, connects with new range of activities in the field and reduce operation, transportation cost.

- Policy reforms for reallocation of resources to the diversified directions of activities in the economy:

There should be effective reallocation of labor market resources from diminishing sector (s) to more potentially growing sectors.

- State intervention to the domestic economy, especially to specific fields, failures in specific markets:

In the short run there can be some problems specific for particular sectors. Government intervention sometimes is needed to solve these short-term critiques. For example, government subsidies to the specific sector to increase competitiveness. Government intervention tool can be use in the short-term, and in the long-run this sector will be able to tackle with difficulties.

Why resource rich countries have more potential for diversifying their economies?

S. Kuznets explained that developing countries are mainly based on primary industry and realization of abundance of resource for growth. It is questionable whether diversification brings transformation or structural transformation leads diversification. As economy gets more developed it shifts to the more efficient fields, which is according to Kuznets shift from primary industry to secondary and from secondary industry to tertiary sector.

Structural transformation also includes labor market structural transformation. In most of the developing countries primary sector keeps majority of people involved. It means they can shift to other sectors.

## **2.2. Positive experience of economic diversification**

When economic diversification policies are prepared policymakers clearly know that future path of economic diversification is unpredictable and costly when it focuses on long-run. The directions and results of diversification are divided into three categories:

a) Here are some economically diversified countries which have diversified toward manufacturing and service industries to meet current demand in the market (Mexico). Development policy in these countries serve for expanding supply capacity.

b) Following category determines directions where countries developed their strategies to improve existing industries through bringing innovation and technology to increase productivity and efficiency of existing market. With limited resources they have tried to raise the range of current activities within sectors. Such as bringing new innovations to increase range of exported agricultural products (here existing industry is agriculture and economy stimulates to develop this sector).

c) Last category depicts that some countries try to use geographic and natural resources advantages to develop sectors. Like resource rich countries try to improve resource fields to extract resources and give it to the market in different form of goods.

The challenge in the economy is to determine the best pattern to follow. Also, it is important to depict whether economy tends to become more dependent on a single side development or is there any overconcentrated sector. However, Richardian model explains that economy should focus on specific field and improve this sector to gain comparative advantage in front of its partner, but today`s emerging global economy requires new efforts to keep sustainability. Economy should find where it has comparative advantage and develop related sectors. Depending on single source of FDI is also challenging. Policy makers should always think about “if” button. If economy faces set of critiques how economy will behave to tackle with these issues. There are several countries which nearly whole economy is triggered by big foreign direct investment. If sources of this investment is few, then dramatic fluctuations directly affect on economy. For example, FDI counted big share of GDP of Iceland, Estonia and Ireland. During the crisis economies have faced with

dual challenges- sharp decrease in FDI and decline caused by other factors. In 2011 Ireland received FDI counted 9.9% of its GDP which rose to 70% in 2015 and drastically moved to 26% in 2016.

Economic diversification involves predetermined and well-structured strategic policies. These policies are meant to promote new fields of economic activities and divided into several sections: Industrial, infrastructural, investment, public and private sector development-oriented policies.

In order to facilitate economic growth, it is important to focus on private sector. Here there is no perfect policy could be implemented in all economic condition. Depending on countries` features these strategies vary. Policymakers should take into consideration fact-based analysis of private sector.

**Macroeconomic policies** are central focus group including taxation and exchange rate, inflation rate. There should be supportive business climate for private sector promotion. Appropriate level of taxation has always stimulated private sector involvement, entrepreneurship climate and foreign direct investment in different sectors. Here another necessary tool is developed financial-credit system. Private sector has to have access for financial resources. Improvement in private sector gives new improvement line for job creation. If there is not stable macroeconomic environment, it is mainly due to weak institutional base. Stable inflation rate, tax rate attracts economic units to be involved.

Selective policy directions increase effectiveness of diversification in the long-run. Another tool to get strategic diversification tool- foreign direct investment is capital flow from out economy players who brings innovation and capital to facilitate the growth of sector. Actually, FDI gives spillover effects when it is used due. It means, in the first stage it may increase specific sectors` output, influence directly, but in a longer term its components will affect on the whole economic system. When country is not able to provide substantial support to the sector, FDI is needed.

Particularly, in developing countries economic factor are mobile. They tend to move more productive and more beneficial sector. That is motive of this transformation. In any way diversification contributes not only to predetermined specific field of economy, directly and indirectly influence to the growth of other sectors. For example, with the existence of well-functioning institutions private growth in private sector will enhance saving rate, will play the role of multiplier for other sectors, increase skill level and total output.

During the last several decades diversification has been priority for the economic outlook of especially developing and resource rich countries. It has been seen as a gate to struggle with possible future economic difficulties. In resource rich countries, governments try to use revenue coming from natural resources for the development of other sectors to provide secured stability in the long-run. Natural resources extraction may only provide short term input, but in the long-term diversification is need. Of course, none of the economy is based on single sector. The problem is capacity of these few sectors are not able to compensate in the absence of dominant sector. Diversification is mitigation of these risks.

Some countries have successfully implemented socio-economic policies on the way of diversification. However, they did not have such developed sectors before some decades, currently they have achieved their diversification goals. The following countries have experienced this structural economic transformation:

### **South Korea**

As one of the brightest example, S. Korea has shown dramatic transformation in its economy over the last 60 years. In early 1960`s, government has introduced five years development plans and started to achieve economic goals one by one. Export has turned to the side of labor intensive export, which provided investment capital flow to increase saving level in the economy. In the first 25 years share of manufacturing doubled, rate of saving increased from 3% to 36%, GDP grew average 8% annually, volume of commodity trade increased from about \$500 mln to about \$128 bln. This country has got this “miracle” with low resource endowment, scare resources.

Korea`s labor intensive export experienced decline as a result of increasing competition in the global market. That is why government has accepted new strategy to move from low productive labor-intensive sectors to capital intensive sectors. Local and global market responded these changes positively.

Following table illustrates the changes in the structure of export products in Korea between 1960 and 2010. It depicts the change from labor intensive products` export to high value-added more sophisticated products` export.

**Figure 3. Changes of export products in Korea.**

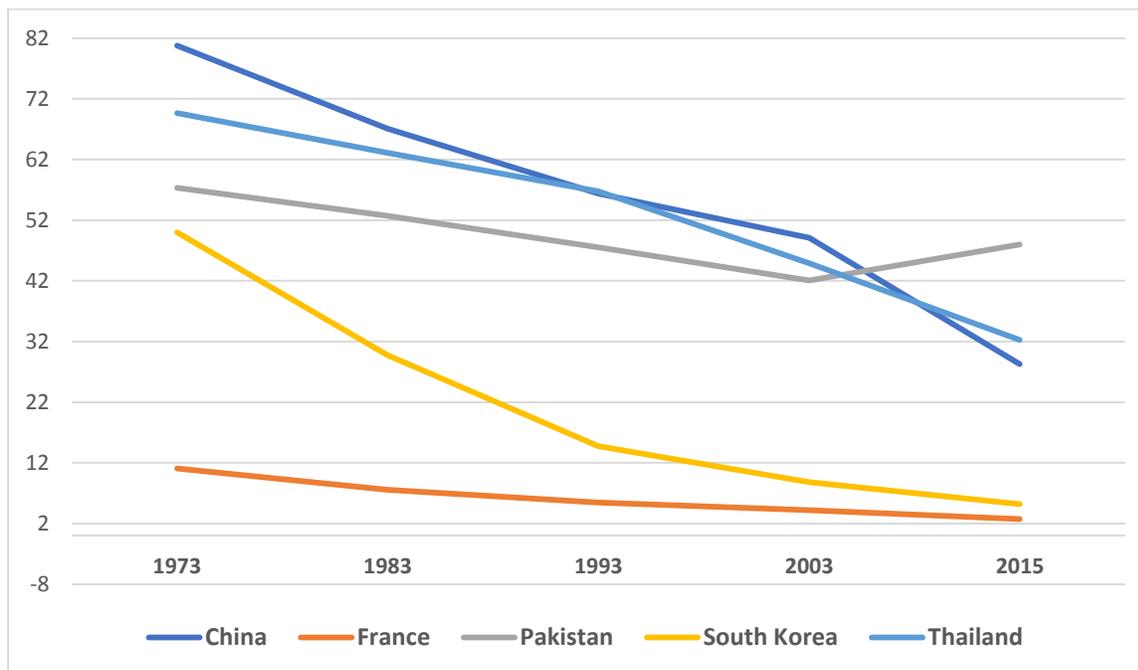
1960	1970	1980	1990	2000	2010
Iron ore	Textiles	Textiles	Electronics	Semiconductors	Wireless telecommunication
Tungsten ore	Plywood	Electronics	Textiles	Computers	Motor vehicles
Raw silk	Wigs	Iron and steel products	Footwear	Automobiles	Ships
Anthracite	Iron ore	Footwear	Iron and steel products	Petrochemical products	Semiconductors
Cuttlefish	Electronics	Ships	Ships	Ships	Steel

Source: Kyung Soon Song- "Korea's experience with economic development and transformation".

As the effect of economic transformation economies tend to diversify from low value-added sectors to high value-added sectors. Of course, it also affects on labor market structure. Given government incentives, new opportunities, rising wage level, increasing living standards make people move from primary sector to secondary and tertiary sector. Over the years, as countries develop their economies, economy tend to diversify and as a result share of secondary and tertiary sectors (industry and service sectors) increases. Involvement in the traditional sector decreases gradually.

Decreased employment in agricultural sector is mainly due to the growth of industry and service sectors. This is sign of increasing rate of total output, because productivity of remaining sectors is higher than agriculture. Over the years, rural-urban migration has been in up trend. The reason is concentration of secondary and tertiary industries in urban territories.

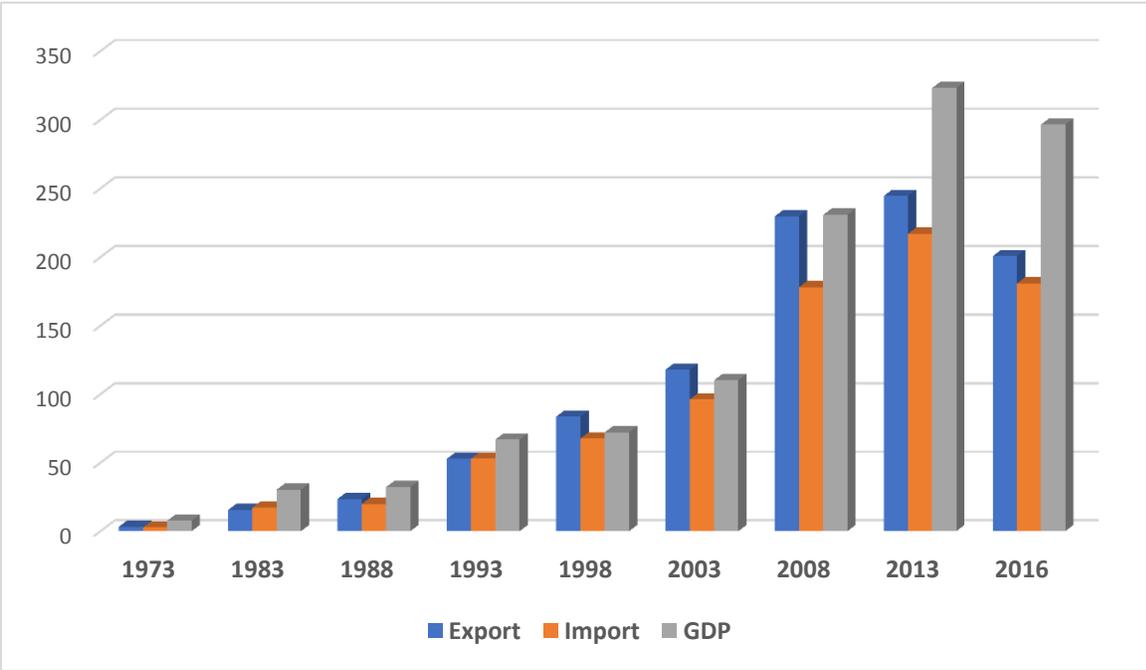
**Figure 4. Share of agricultural employment (% of total population).**



**Malaysia** as one of initial natural resource driving economy with abundance of natural resources got significant change in the last 60-65 years after gaining independency from England. Initially it was one of agricultural export oriented country in the region. Country has experienced strong industrialization wave and today its export is concentrated more on manufactured goods. Between 1957 and 2007, average annual growth was higher than 6%, and income per capita increased nearly 25 times. As a result of development in nearly all economic sectors, poverty level has decreased from 50% to 3.5% in 2010. After 1970`s government has started to play more visible role in public sector. Push strategy has been introduced, industrialization was stimulation for volatile but increasing growth in non-agricultural sector. Public investment has increased which is followed by increase in private sector investment in economy. Especially after 1970`s attentions turned to increasing importance of oil and gas sector. Share of export of goods and services increased annually 18% between 1990 and 2000. Composition of exported goods has been diversified in the last few decades. Main exported commodities were tin, rubber, palm oil in the early years of independence which has turned to

manufactured goods after industrialization and reached approximately 4/5 of total export in 2005 and share of oil and gas sector`s revenue accounted 8% of GDP.

**Figure 5. Volume of Malaysian export, import and GDP between 1973 and 2016 (\$ bln).**



Source: Malaysian Central Bank

Expanding industrialization led to decreasing importance of agriculture, while manufacturing and service sector share increased in GDP. When the share of service sector is compared with some decades ago, there is significant growth, but it still accounts for a small segment in export. The largest increase in service is observed in high value-added sectors: ICT, tourism, education.

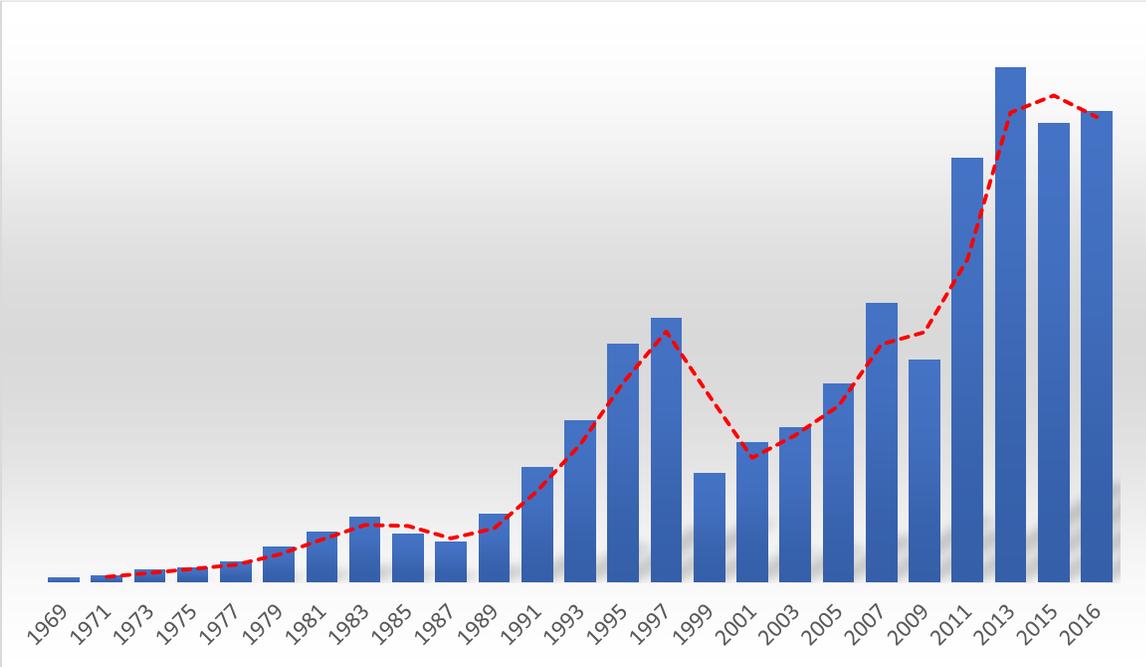
Despite of sizeable government intervention to the economy, especially to public sector through big investments, Malaysian government started to realize policies for import substitution to reduce economy`s dependence on import. That is why government motivated private sector to start production of industrial goods to see domestic demand. However, there was still high dependency on import of consumption goods which was reducing slightly.

At the end of 1990`s Asian crisis reached to Malaysia. To keep economy well-functioning government has realized policies addressed on improving economy through public investment and fiscal stimulus programs for private sector. However, during the crisis public sector investment went down, economy

compensated this loss with the increase in private sector investment. For handling all economic conditions, the role of FDI is undeniable. With the support of FDI to catalyze diversification in the economy gave its positive contribution. Investment in agricultural sector has turned primary activities to more productive stage. For instance, rubber plantation has transformed to the field of palm oil production.

Government`s FDI policy was based on dismissing the source and in any way attracting FDI. However, this policy approach has changed and currently Malaysia tries to attract FDI from Middle East Islamic countries and Malaysia has become Islamic investment hub in the region. Government has realized that for getting this FDI there should be strong economic stimulus. They have implemented tax cut policies for relative fields, paid strong attention on infrastructure, created “tax heavens”, special economic zones, free trade areas, provided accelerated depreciation and so on. It strengthened not only countries position in investors point of view, but also provided new opportunities for long-run development.

**Figure 6. Capital investment in Malaysia in 1969-2016 (billion USD)**



Source: [www.theglobaleconomy.com](http://www.theglobaleconomy.com)

Inclusive promotion of free trade, foreign direct investment, stable exchange rate, reforms in taxation are several tools used by Malaysia. Government`s 2020 plans include being high income, strengthening economy through diversification of trade via bilateral and collateral trade agreements with other Asian and also other

countries. Here, free trade agreements are believed to be used effectively to expand trade relations.

**Australia** also experienced transformation in its economy and gradually moved from primary sector to tertiary sector and became developed high-income country. There are dozens of reasons for this success: technical change, raising demand for tertiary sector's output, high rate economic growth in specific trade partners, particularly Asian countries. Different sectors, including service, and industrial field, mining has attracted huge amount of investment, which became catalysator for their growth.

In mid 1850`s, agrarian sector accounted nearly 35% of total output, even in this time demand for service sector was high because of being far from other nations. Telecommunication, education, transportation, warehouse, retail services had significant importance. In compare of early 1900s in 1950s share of manufacture industry has risen enormously, and portion of population involved in this industry grew from 15% to quarter. However, this trend is followed by immediate decline in manufacturing in total GDP after 1960s with keeping rising manufacture output. Service sector replaced decreased share of manufacturing, which rose from three fifth to four fifth of economy between 1960 and nowadays.

**Figure 7. Shares of industrial activities in Australia (%)**

	<b>Agriculture</b>	<b>Mining</b>	<b>Manufacturing</b>	<b>Service</b>
<b>Output</b>				
<b>1960s</b>	<b>13</b>	<b>2</b>	<b>26</b>	<b>59</b>
<b>1980s</b>	<b>6</b>	<b>6</b>	<b>19</b>	<b>70</b>
<b>2000s</b>	<b>3</b>	<b>7</b>	<b>12</b>	<b>78</b>
<b>Employment</b>				
<b>1960s</b>	<b>10</b>	<b>1</b>	<b>26</b>	<b>73</b>
<b>1980s</b>	<b>6</b>	<b>1</b>	<b>17</b>	<b>75</b>
<b>2000s</b>	<b>4</b>	<b>1</b>	<b>11</b>	<b>84</b>
<b>Investment</b>				
<b>1960s</b>	<b>11</b>	<b>5</b>	<b>19</b>	<b>64</b>
<b>1980s</b>	<b>6</b>	<b>11</b>	<b>13</b>	<b>70</b>

2000s	4	13	11	72
<b>Export</b>				
1960s	62	15	9	14
1980s	33	38	10	18
2000s	18	42	17	23

Source: RBA, Withers, ABS

### **Risen service demand as one of the structural change driver:**

Demand for service has been in the up trend since 1960. Total amount of consumption spent for service has increased from 40% to 60% during the last 55 years. Main direction of this spending is in health, education, recreational and financial services. At the same time, it has been major source for unemployment reduction.

### **The effect of Asian countries` industrialization:**

As known, mining industry has shown sharp increase because of rising demand for this sector`s output. The main demand was sourced from outside market. East Asian countries developed their economies through fast growing manufacture industry and between 1970 and 2010 their share in total manufacture has increased more than twice. Low labor cost led this growth in manufacturing. Japan`s development was followed by other east Asian countries. In another word increasing foreign market demand increased the importance of mining industry over the years. Share of commodity export fueled by government incentives and changes in technology. Policies harmonized for commodity export.

### **New structural change wave after reform:**

Government signed new reforms in order to create more competitive economic environment in different sector. These sectors include service (banking, finance, tourism), agriculture, manufacturing. Level of government intervention to private sector and state protection on several sectors has been reduced. Privatization in government owned public service sector (transportation, telecommunication) created more competitive atmosphere which increased standards and quality in these fields. Diminished importance of trade obstacles made local consumers choose imported goods and services in the lower cost, which led local participants specialize in specific sectors. Additionally, creation of competitive atmosphere in the economy attracted foreign direct investment and technical

resources flow in various direction. The main direction is mining and service industry

However, economy has grown gradually, terms of trade in Australia showed significant decline from 2011 to 2016. Australian mining industry recorded the highest volume in 2016 which is exported. In compare of 2008, Australia exported 63% more iron ore (world`s largest iron ore producer) in 2013. This drastic increase in supply and lowering demand in foreign market made obstacles for economy and as a result local currency devaluated. Mining boom was the main reason for fast economic growth in these years. This fact shows however service sector keeps high proportion in the economy, but volatile global commodity market prices are still able to affect on economy.

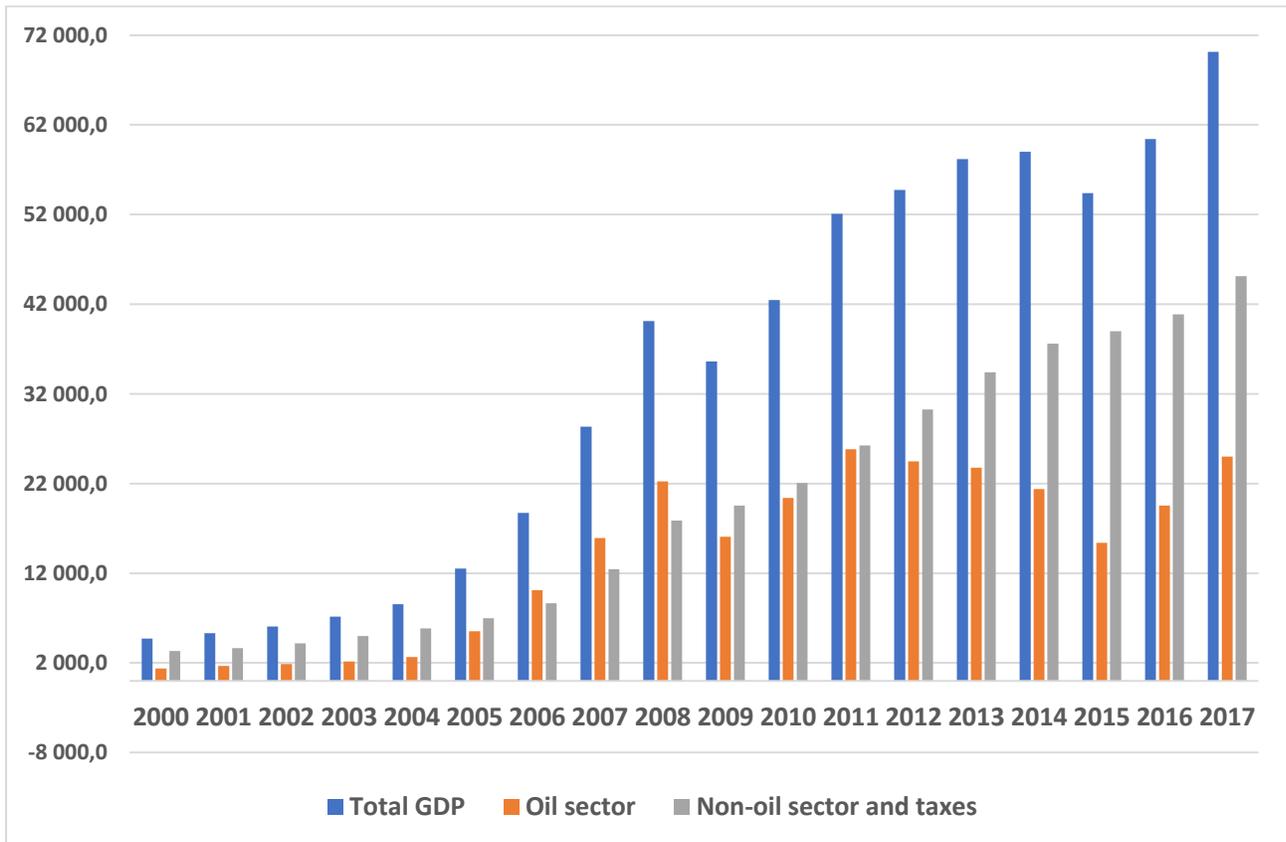
### **3. Economic diversification of Azerbaijan economy**

#### **3.1. Development of non-oil sector in Azerbaijan**

Strategic position of Azerbaijan has always provided several advantages for economic development. Of course, these advantages attracted others` attention too. When Azerbaijan was a part of United Soviet Socialist Republics Azerbaijan economy had experienced significant growth in different sectors, including industry, agriculture. As other member countries development patterns in Azerbaijan used to be determined by central economy. After getting independence in 1991, Azerbaijan started to implement its independent domestic and foreign policies in all the fields. In the next few years Azerbaijan faced with various economic and political pressures. Occupation of 20% of territory by Armenian troops cost billions of dollars for economy, hundreds of people were killed. Poor governance, political and economical instabilities directly and indirectly affected to economy. Economy faced with significant reduction in employment level, reducing growth rate of gross domestic product, growing inflation. Between 1992 and 1996 average annual inflation rate was more than 820%. That is why government introduced new national currency to stabilize price level.

After 1994 new economic reforms were introduced to tackle with economic crisis. Geopolitical position of country, abundance of natural resource reserves enabled country contribute economy with relevant strategies in appropriate fields. Promotion of potential benefits from natural resources attracted other market players` attention. 1994 was turning point in the country`s economy. Azerbaijan has signed “Contract of Century” to attract foreign investment in the oil and gas sector, letting several international organization to invest in Azerbaijan sector of Caspian Sea. Investment flow to oil and non-oil industry increased which leded country overcome recession in the last few years. Oil boom and privatization waves directly triggered this growth. Private sector involvement started to increase in the economy. Increasing oil revenue and investment flow directly and indirectly started to fuel other sectors` growth. However, GDP growth was about 5.7% in 1992-1996, it reached to average 8.7% in 1997-2001.

**Figure 8. Oil and non-oil GDP growth (million manat).**



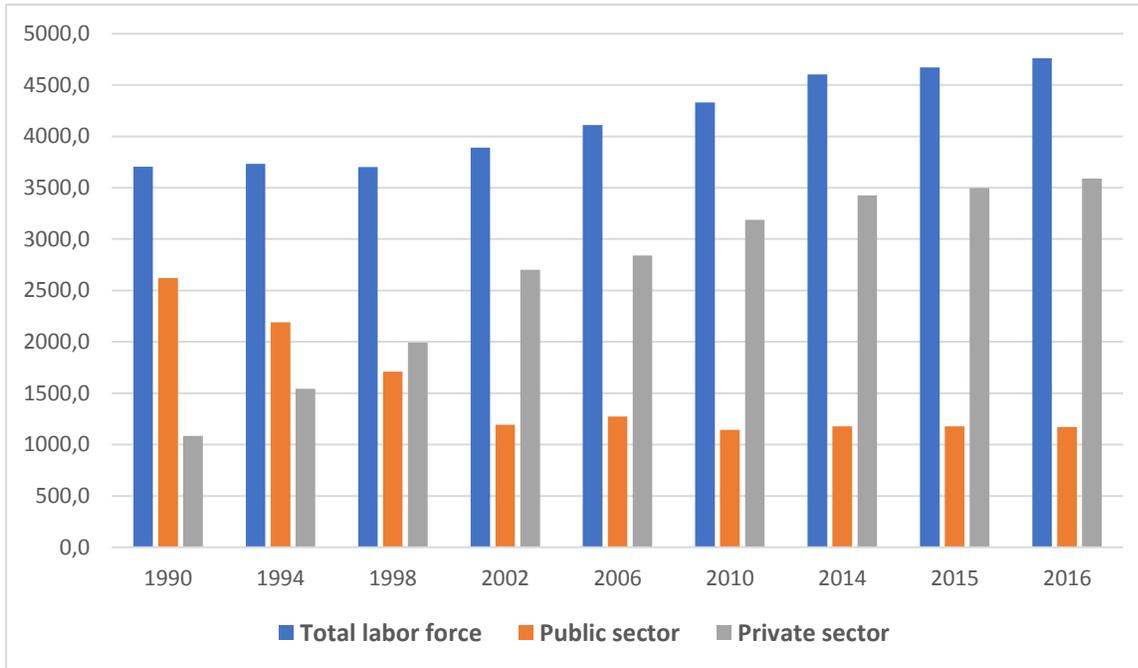
Source: [www.stat.gov.az](http://www.stat.gov.az)

Volume of extraction of oil reserves and oil and gas production increased with growing world market energy resource commodity prices, which provided significant growth in GDP. 2008-2009 crisis affected to the world market prices, that is why in 2009 GDP declined, but in 2010 it again went to the up trend and reached to about 42 bln manat. The same tendency is seen in the growth rate of GDP, it has been affected by dramatic oil and gas price decline. Government has some objectives that should be get in the limited time, for instance, it has the goal to double the economy in 2010-2020 and for getting this target average GDP growth should be between 8-10% annually. With taking volatility of commodity market prices into consideration, it is obvious that this target can be achieved by the growth in non-oil and gas sector.

Inflation rate is stimulated by growth in public spending after 2003. Inflation went up from 2.25% to 20.9% between 2003-2008 and in 2009 decreased dramatically to 1.5%.

With relevant employment policies in the market the level of unemployment and poverty has decreased over the years. Poverty level went down from 47% (2002) to about 5.3% (2015).

**Figure 9. Public and private sector employment (thousand people)**



Source: [www.stat.gov.az](http://www.stat.gov.az)

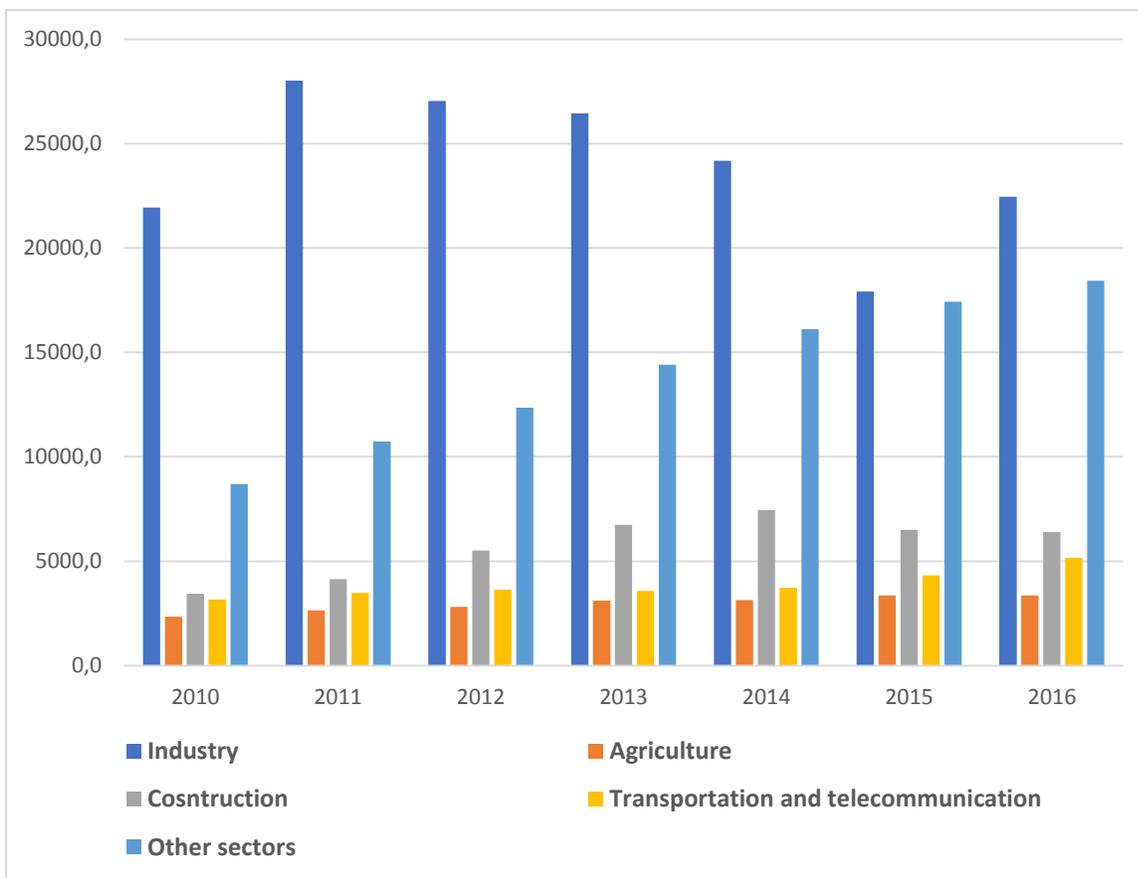
The main explanation for slow growth of economy is that all resource-based economies have their own certain level of capacity. When economy gets this point then speed of growth tends to decline. Main arguments for this decline can be explained by as:

- Decreasing market prices for these commodities or the volume of extraction of resources;
- Lowering market demand for this resource;
- If growth in the economy is at the same level and if GDP grows annually, the rate of economic growth in GDP diminishes in each base year.

For getting long-term sustainable economic growth goal, particularly since 2000 government has focused on diversifying economic activity to diminish oil and gas sector's role in the economy, substitution of import commodities by domestic market capacity. That is why dozens of decrees and state programs have been decided to realize in the next years. These programs serve for:

- Poverty reduction;
- Provision of food security;
- Getting economic growth by the expansion of private sector development;
- Improvement in of business environment for SMEs;
- State programs for the development of regions` socio-economic condition;
- Improvement in revenue management field;
- Increasing employment through development in different sectors and reduction of unemployment;
- Development of tourism and other service sector branches.

**Figure 10. Sectoral division of GDP (mln manat with nominal value).**



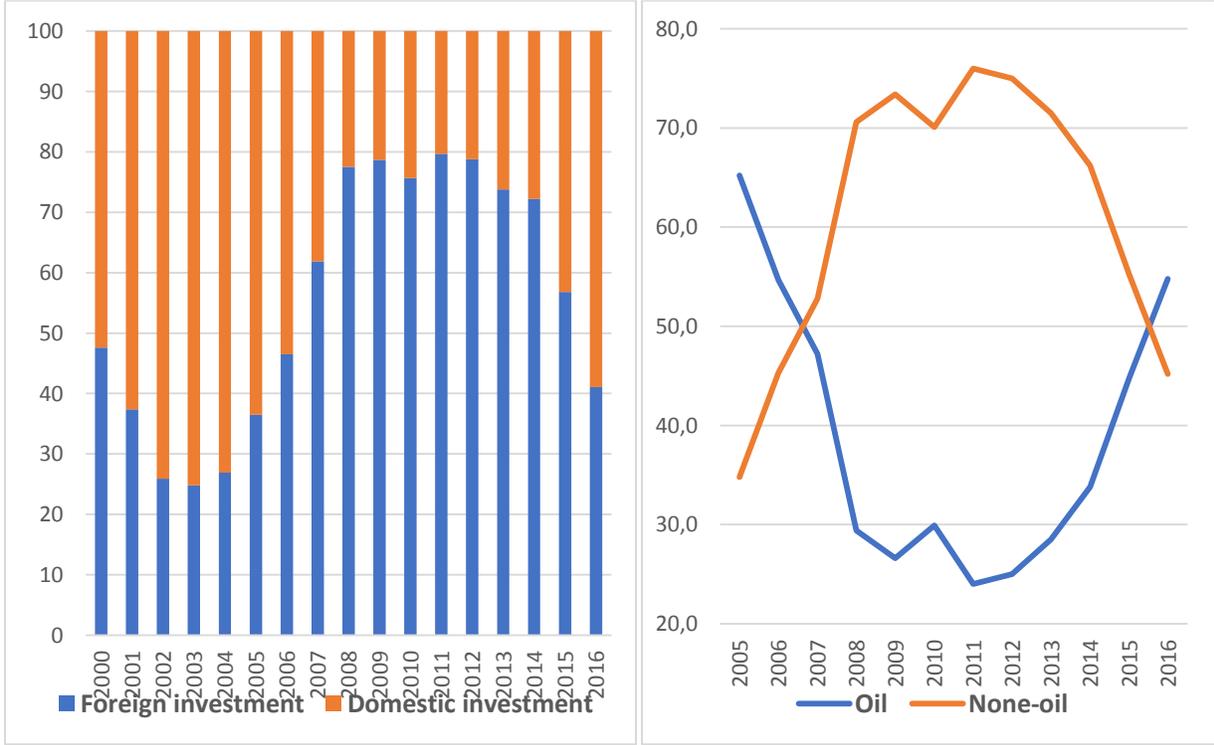
Source: Statistics Committee of the Republic of Azerbaijan

The main direction of diversification in Azerbaijan is turning revenue expenditure to non-oil sector and main directions are determined as potential fast growing sectors, including agriculture, construction, mining, and service sector. In general, most of the market economy transition strategy followers are in favor of increasing capital capacity of economy through commodity based export, however recent

trend illustrates that Azerbaijan has already started to point the importance of delivering capital accumulation capacity to non-oil sector (agriculture, transportation, communication, tourism and etc.) by investments. However, government motivated private sector by growing public sector investment and expenditure, tax and other incentives for appropriate branches of economy, subsidies, infrastructural development to create more competitive, productive business environment in non-oil field, private sector itself increased volume of investment over the years.

Public sector support to non-oil development played bridge function in the recovery. Effective investment strategy provided rapid payback in investment outputs and showed significant recovery and growth of these sectors. Likewise, increase in domestic and foreign sourced investments increased parallely. Statistic data show slightly growing share of domestic capital investment, while none-oil sector investment proportion decreased significantly in recent few years.

**Figure 11. Distribution of foreign and domestic capital investment (%) and share of capital investment in oil and none-oil industries.**



Source: Statistics Committee of the Republic of Azerbaijan

Development of non-oil sector has always been priority in Azerbaijan economy despite of growing share of industrial capital investment as illustrated in the above graph. Mining industry especially oil and gas extraction industry always attracted majority of foreign investment which share of investment in compare of other industries declined until 2012 and started to increase moderately. Main fueling support for non-oil sector, undoubtedly comes from oil and gas export revenue.

In diversification strategy government initiatives play important role. Different institutional units collaborate together for the diversification goal. Various state running programs were introduced in recent years. This state programs are targeted to strength private sector, provide new opportunities for small and medium businesses, create new fields of activities, directly or indirectly influence to the sustainable growth of economy. From 2000, several following programs were introduced to power non-oil and gas sector to have more diversified economy:

➤ **Food Security Program and State Program of Agricultural Development for 2002-2006.**

These programs aimed to improve agricultural sector, improve productivity, support to private sector involvement in agricultural production and processing, provision of subsidies to predetermined appropriate directions, strengthening position of domestic agricultural market in global market, enhance use of modern technologies in practice. Program mentions ways and direction of systematic implementation of agricultural development policy through enhanced access for financial and credit resources in particularly regions.

➤ **State Program for Poverty Reduction and Economic Development for 2003-2005.**

This state program focused on development of agrarian, tourism and energy sector which have great capacity for unemployment reduction, empowering agricultural involvement by providing better opportunity in the regions for entrepreneurs, coordination between government institutions and private sector and improvement in production of energy resources. Alternative energy sources were considered as a key point in program.

➤ **State Program on Development of Tourism for 2002-2005.**

Program aimed appropriate level of development in tourism via using tourism resources efficiently to create competitive tourism market. As a backbone of tourism in country private sector development was set as a priority.

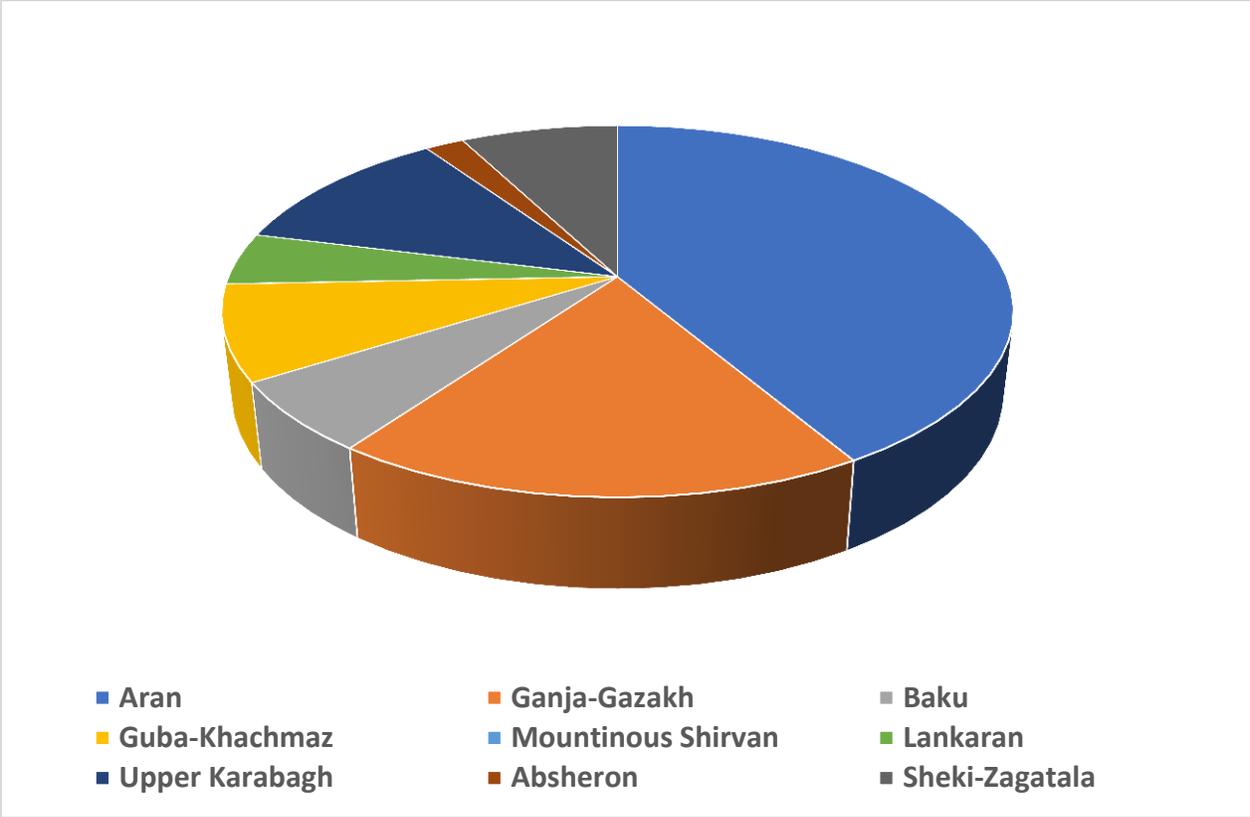
➤ **Employment Strategy Program in Azerbaijan for 2007-2010.**

Main purpose of program is foundation the base of systematic institutional base for regional employment centers. These centers would provide new channels for labor market: data centers to provide wide range of information for people, determination of standards, market analysis, determining ways of low level unemployment, high rate of youth employment in the regions, diversification of fields for employment, provision of better access for financial and credit resources to stimulate private sector development. Farms were planned to be provided with low tax rate, leasing opportunities, seeds and other supports to expand their activities, involve more people in production and attract more investment to their current farming activities.

By taking into consideration the importance of financial credit institutions` role on, especially regions` development it is fact that some policies have to address to increase efficiency and effectivity of these units. In the regions, private sector players should have better access for financial resources. For instance, National Fund for Entrepreneurship Support under the Ministry of Economy of The Republic of Azerbaijan played significant role for regions` development with hundreds of investment projects. It provides low rate short and long-run credits and financial support to small, medium and big investment projects. All these investment projects are realized in different part of country, in different regions. Most of these projects are generally created in agricultural sector. It shows high importance of agriculture in the regions.

In 2016, National Fund for Entrepreneurship Support accepted 2221 investment projects in agricultural sector which accounted 94.5% of total number of projects. Number of non-agricultural sector investment projects was 129 which was 5.5% of total. Agrarian sector attracted about 150.38 mln manat, non-agrarian sector got 39.4 mln manat investment and credit in 2016. 2274 investment projects were small-scale businesses, 36 and 40 of them were medium scale and big investment projects respectively.

**Figure 12. Distribution of funded investment projects in the regions (number of projects out of 2350 projects).**



Source: Azerbaijan National Fund for Entrepreneurship Support

According to international experience on non-oil sector activities are divided into several categories depending on various criteria. When government choose diversification strategy, there are some factors and possible effects in economy should be taken into consideration beforehand. These criteria are:

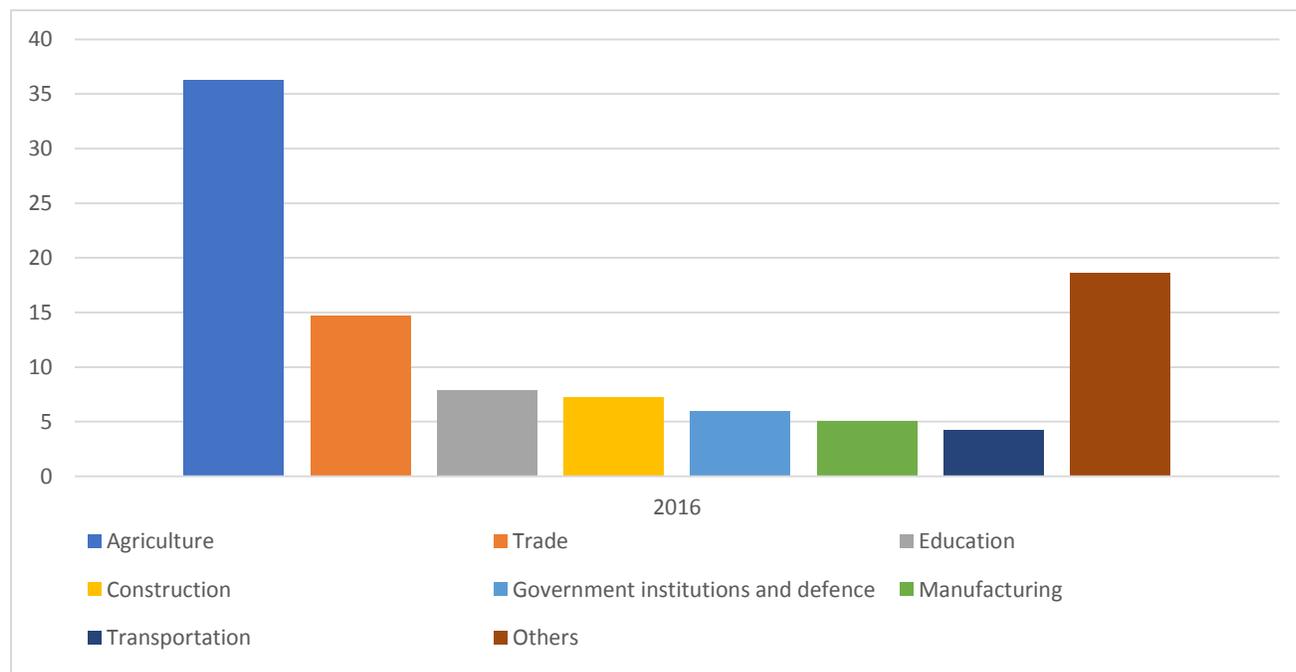
- Linkage with other sectors;

Meaning if country paves the way to this sector for diversification how it can stimulate other sectors` development. It can be thought as specific sector`s locomotive effect.

- Labor-intensity of sector;

If primary goal of diversification is getting more sustainable labor market, economic sector which has more employment capacity. For example, in 2016 more than 36% of people involved in agricultural sector.

**Figure 13. Sectoral division of employment in Azerbaijan (% of total population)**



Source: Statistics Committee of the Republic of Azerbaijan

- Export potential of sector;

This criteria determines export capacity, current position and importance of sector.

- Import substitution potential;

However, some sectors` capacity for export is not big, but they play particular role in substituting imported goods and services. As a part of diversification strategy, import substitution reduces country`s dependency on foreign market. If domestic sector is as competitive as global market, then country can easily substitute its import by domestic goods and services.

Table 1. Following graph illustrates priority non-oil sector for diversification in Azerbaijan.

<b>Sector/Criteria</b>	<b>Linkage with other sectors</b>	<b>Labor intensity</b>	<b>Export potential</b>	<b>Import substitution potential</b>
<b>Agriculture</b>	High	High	High	High
<b>Fishing</b>	Moderate		High	High
<b>Food industry</b>	High	Moderate	High	High

<b>Consumer goods industry</b>	Moderate	Moderate	Moderate	Moderate
<b>Chemical industry</b>	High	High	High	High
<b>Tourism</b>	Moderate	Moderate	Low	Low
<b>Education</b>	Moderate	High	Low	Moderate
<b>Electric power industry</b>	Moderate	Low	High	High
<b>Construction industry</b>	Moderate	Moderate	Moderate	Moderate

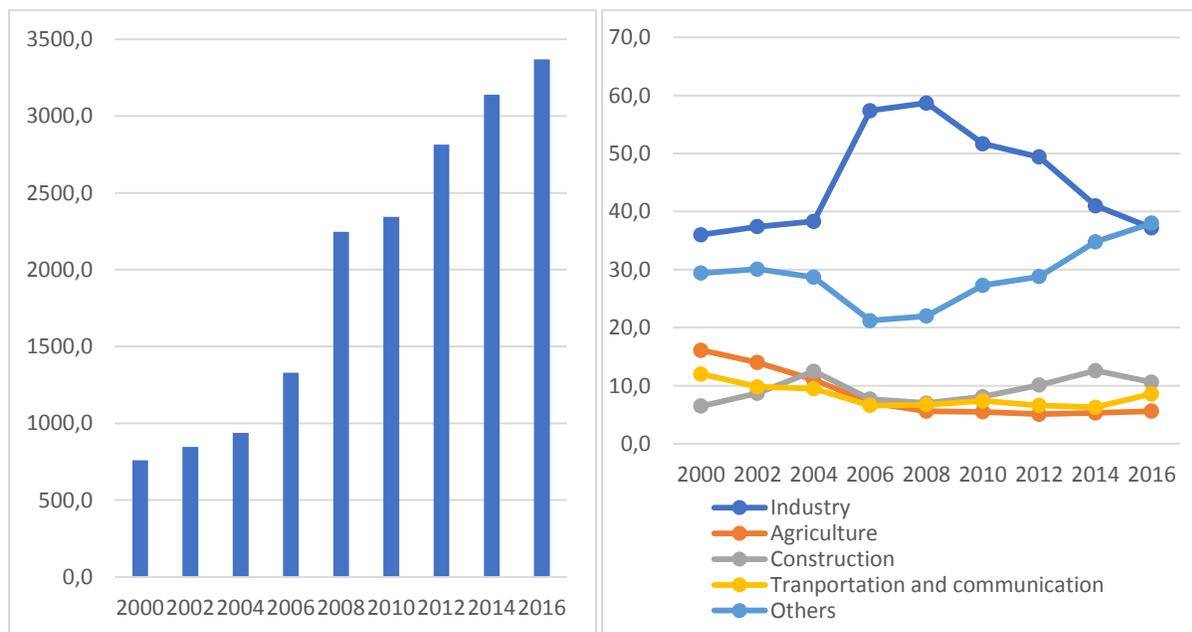
## 3.2. Future opportunities and policy suggestions

### Agriculture

In early 1990s, after the collapse of USSR as all other sector agrarian sector has faced with rapid decline in Azerbaijan. In the first five years (1990-1995) total agricultural produced output halved which was replaced by slight increase after 1996. Majority of labor force involved in this sector. 36% of total employment belongs to agriculture. It should be taken into consideration that especially in the regions, major part of non-oil industry is agriculture, which covers significant part of labor market. In the last decade average monthly salary in agricultural activities increased from 41.6 manat in 2005 to 253.8 manat in 2016 which means it plays special role in poverty reduction.

However total agricultural production increased after 1996, but as a result of rapid growth in industrial, service, construction share of agriculture in economy decreased slightly.

**Figure 14. Total agricultural output (mln manat) and Sectoral distribution of GDP (%)**



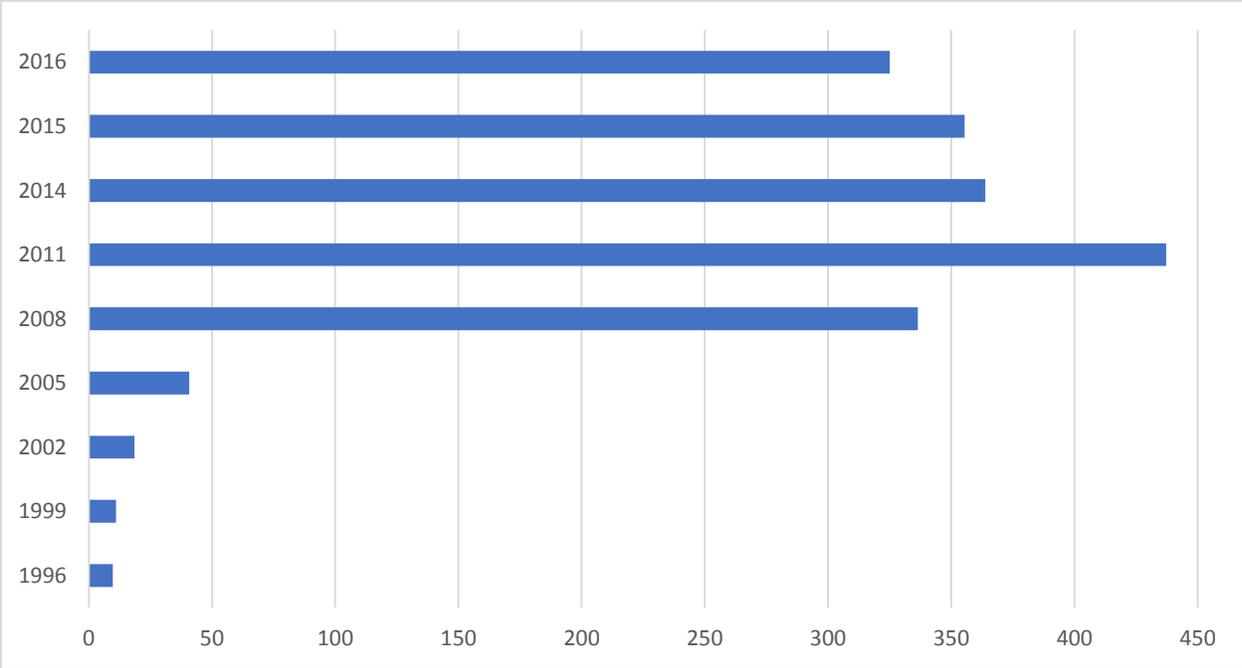
Source: Statistics Committee of the Republic of Azerbaijan

Agriculture in Azerbaijan is characterized by low productivity mostly because of underdeveloped irrigation system, unsophisticated traditional cultivation practice, low rate of technological advancement implementation in crop breeding. However agricultural production has low productivity, it has huge capacity for improvement and for export. In 2016 agriculture accounted about 5% of GDP output, but increasing efficiency in production it can be raised. There is increasing market demand in neighbor countries` and also region countries` markets.

After gaining independence, government introduced new land privatization wave. It aimed private sector involve in agriculture, increase investment, get higher productivity, diversify range of activities within sector, improve irrigation and resource allocation system. As a result, 870000 new family farms were formed. The problem at this time came with unstructured market, collapse of previous system, inherited Soviet traditional agricultural experience, bad credit-finance system, bad conditioned infrastructure, unstable market pricing mechanism.

Ratio of capital investment in agrarian sector has seen moderate increase in last 2 decades, but it is still too low in compare of other sectors.

**Figure 15. Agricultural capital investment pattern (mln manat).**



Source: [www.theglobaleconomy.com](http://www.theglobaleconomy.com)

In 1990 share of agricultural capital investment was 14%, but it was replaced by the growth in industry. Agricultural share decreased dramatically in 1994 to 0.9%.

Industrial capital investment share increased from 36% to 75% in 1990 and 1998 respectively.

Government started to realize number of state running development programs to provide better environment for small and medium enterprises, create modern agricultural infrastructure to stimulate agrarian sector for export. Dozens of incentives are given to people involved in agricultural production, including tax exemption, subsidies (fertilizers, seed production, fuel, irrigation, agricultural lending) low rate credits, leasing of agricultural machinery and technologies, harmonized customs procedures for agricultural goods export.

“Azerbaijan 2020: outlook for future” emphasizes importance of rural-agricultural development and determines main directions for diversification of traditional low productive, slow growing agricultural sector:

- 1) Improvement of agrarian industry with using raw materials and foods produced in domestic market;
- 2) Government support for agricultural value chain production;
- 3) Improvement in access for financial credit resources in agrarian sector;
- 4) Development of agricultural insurance system for risk mitigation purpose;
- 5) Improvement in R&D in agriculture;
- 6) Sustainable growth in agricultural production with increasing productivity.

Nowadays, international experiences tend to be implemented to develop agrarian sector. For instance, agrarian zones or agroparks are new phenomenon for Azerbaijan but it has been successfully created. Agroparks are provided with modern agricultural machineries and technologies are used for automatic and semi-automatic more productive production process. Yalama Agropark is the first of this practice and is believed to be role model for other special agrarian units in different regions. Agriculture is backbone of rural regions, that is why growth of rural regions economy is highly dependent on the agricultural sector`s development.

## **Service**

Transformation of economy brings new opportunities. Service as one of fast growing sector in economy gives new ways of diversification. Likewise, other sectors, service sector experienced significant growth in last few years. Statistical data gives clear view how fast this sector increased. In different branches of

service this growth rate is different. For instance, between 2000 and 2015 total output in real estate and accommodation services grew more than 17 times and similar patterns are seen in other- trade and transportation services (5 times), health services (5.5 times), entertainment services (above 10 times).

Additionally, as known service sector- share of tertiary economic sector is one of the main indicator determines how country is able to use its "non-natural resources" and use new gate of modern economic trend. In most of emerging and developed countries the share of service sector is getting to be increased. In developed countries economy is mainly based on service sector. Service sector has big capacity for employment which directly contributes to unemployment and poverty reduction.

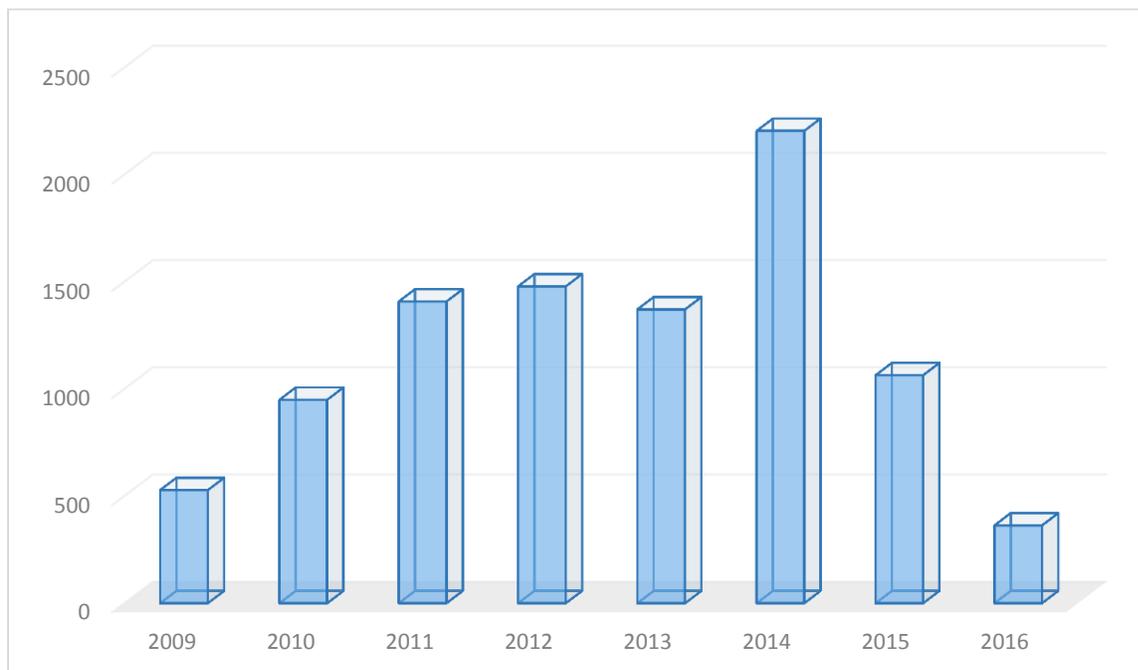
## **Tourism**

One of the priority non-oil development pattern is concentrated in tourism sector. Good geographical position, climate, beautiful and sightseeing landscapes, recreational and other touristic resources enables this sector grow fast. Increasing quality and quantity of tourism services are related with big investments by public and private sector to infrastructure and human capital. However, number of people work for tourism sector is not big- in 2009 it was 36,100 people which increased to 43,500 people in 2016 but share of tourism in GDP shows its importance in diversification. 0.8% of GDP was created by tourism service related sectors in 2009 which increased slightly and reached 4.3% in 2016.

There is visible decrease in investment to tourism industry in 2015 and 2016 which is caused by devaluation of national currency, but it positively affected tourism industry, because currency exchange rate changed in favor of foreign tourists.

Tourism contributes directly and indirectly to the economy. In 2016, World Tourism Organization announced that Azerbaijan has experienced sharp increase over the last few years. Azerbaijan has great potential in terms of tourism, that is why tourism's direct contribution to GDP in 2016 went up to 4.1%, in 2017 it grew 7%, however indirect contribution was much more far- 14.6% (2016). Tourism sector contributes for unemployment reduction. 3.7% of labor force is directly engaged in tourism sector, but indirect employment contribution is 13.2%.

**Figure 16. Investment to tourism industry (mln manat)**



Source: Statistics Committee of the Republic of Azerbaijan

To develop tourism industry, enhancing its direct and indirect positive influences on labor market, infrastructure, contribution to GDP government has implemented various government running tourism development programs. These programs aim to develop domestic and foreign tourism market. Additionally, socio-economic policies stipulated private sector to create new tourism facilities, increase service standards. In last few years, Azerbaijan attracted foreigners` attention with different international events, programs and conferences.

Various directions have been chosen for sustainable development of tourism industry: summer and winter tourism, green tourism, sport tourism.

Number of hotels and hostels doubled since 2006 from 285 to 548 in 2016. Transportation infrastructure improved, new information centers are provided in different touristic regions. With government promotion of small and medium entrepreneurship private sector was stimulated by low rate credit, tax and other incentives in the regions.

## **Transportation**

Last 2 decades showed significant improvement in transportation. Huge investment projects were realized by international organizations, government and private

sector. During the decades developed transportation infrastructure have always brought new source of opportunities- integration of markets, increasing trade volume and as a last point a mean of diversification of economy. Strategical geographical position gives dozens of advantages to Azerbaijan in terms of international transportation hub. Azerbaijan is bridge between north-south and east-west. Improvement of transportation infrastructure makes it possible to increase contribution of transportation sector to the whole economy. Azerbaijan-2020 strategy clearly emphasizes the importance of development in transportation infrastructure as an alternative to non-oil industry for diversification. Renovation of railway network and facilities increased efficiency and capacity of this field. According to the estimation, railway capacity can be increased folds in the next years on “West-East” transportation corridor. Future cargo transportation between ports of Caspian Sea and Black sea will provide new opportunity to export and import, and also as a transit route.

One of the biggest investment project in the cost of Caspian sea- Alat international port will expand horizons. It will enable cargo transportation between Central Asia and South Caucasus between Kazakhstan`s Atyrau and Aktau, Turkmenistan`s Turkmenbasi port to export oil and non-oil loaded cargos. Here rail ferry terminal will connect to parts.

The same increasing importance exist in other directions too. Increasing volume of trade and passenger transportation between India and Russia (North-South transportation platform) and East-West transit route create new challenges and opportunities for Azerbaijan. “One Belt, One Road” initiative serves for connecting China`s and Central Asian market to Western countries through transit countries. It is really big initiative and gives new prospects for development of other sectors.

**Figure 17. Cargo transportation with different transportation means (mln ton/km).**

<b>Mean/Year</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Railway</b>	<b>10,021</b>	<b>7,592</b>	<b>8,250</b>	<b>7,845</b>	<b>8,212</b>	<b>7,958</b>	<b>7,371</b>	<b>6,210</b>	<b>5,192</b>
<b>Sea</b>	<b>6,076</b>	<b>6,173</b>	<b>4,859</b>	<b>5,186</b>	<b>5,062</b>	<b>4,632</b>	<b>4,124</b>	<b>2,937</b>	<b>3,002</b>

<b>Air</b>	<b>129</b>	<b>110</b>	<b>139</b>	<b>224</b>	<b>357</b>	<b>443</b>	<b>481</b>	<b>582</b>	<b>683</b>
<b>Pipeline</b>	<b>62,434</b>	<b>73,195</b>	<b>72,931</b>	<b>65,850</b>	<b>63,172</b>	<b>63,734</b>	<b>67,039</b>	<b>67,515</b>	<b>65,924</b>
<b>Automobile</b>	<b>9,947</b>	<b>10,634</b>	<b>11,325</b>	<b>12,356</b>	<b>13,307</b>	<b>14,120</b>	<b>14,516</b>	<b>15,532</b>	<b>15,967</b>

Source: Statistics Committee of the Republic of Azerbaijan

Improved transportation system can provide following positive outcomes to the economy:

- Improved logistic system for domestic and international market;
- Improved transport infrastructure;
- Foreign direct investment flow from other region countries and international organizations;
- Access for other markets by being a part of transport route;
- New source of income for state from other countries (transport fee);
- Improved logistic management system;
- New employment areas;
- Emergence of small and medium transport companies;
- Improved transportation facilities;
- Development of domestic export-oriented production and etc.

Azerbaijan`s 2016 Logistics Strategy emphasizes 2020 target which includes increasing Azerbaijan`s role in several transport routes (Asia-Europe, Iran-Black Sea, Iran Russia) and creating new perspectives for local economy. 2020 Strategy targets to create 19,000new employment opportunities for labor market in trade and logistics field. All transportation means have great economic potential and capacity, that is why having effective, efficient and high quality transportation system serves for domestic and international routes is high priority issue.

## **Non-oil industry**

As known, structural transformation takes country economy from primary to secondary and tertiary sector. When economy shifts from primary traditional agrarian sector new step here is industrial stage. Under USSR several non-oil industries existed which declined during early years of independence. Azerbaijan is full of non-oil natural resources which made it possible to grow in industrial sector. Special state programs, socio-economic policies addressed for the development of non-oil industry especially after 2000. Food security program focused on food processing industry's development, state program on development of regions provided guide for development in the regions to economic players. Growing role of small and medium companies in this period were motivated by government to invest in several industrial fields. Based on 2006-2010 state industrial development policy main direction of industrial development were determined. The necessity of using oil and gas sector revenue to improve industrial field is also mentioned. Main purpose of this policy is creating competitive economic environment in the field of industry to increase export-oriented and import substituting production by increasing investment, technology, know-how and private sector involvement.

State programs determined following direction of non-oil sectors' development:

- 1) Agricultural, as well as fishing industries in the regions;
- 2) Using domestic resources to improve chemical industry which would serve for import substitution;
- 3) Domestic non-oil raw materials can be used to set competitive heavy and black metallurgy (Dashkasan-iron, Sumgait and Ganja-aluminium);
- 4) Development of construction material market which has big capacity to meet domestic and foreign neighbor market demand;

- 5) Support to the private sector in the rural areas of regions (sole businesses, small businesses);
- 6) Poultry meat production- which is able to meet domestic market demand and there are some gaps in foreign markets which can be assessed as potential export directions (Russia, Georgia)
- 7) Support to the automobile, machine manufacturing, development of technology industry (Ismayilli-“Ismabyke”, Ganja-“Ganja Taktor”, Mingachevir-“Kur”, Ismayilli- “Star”).

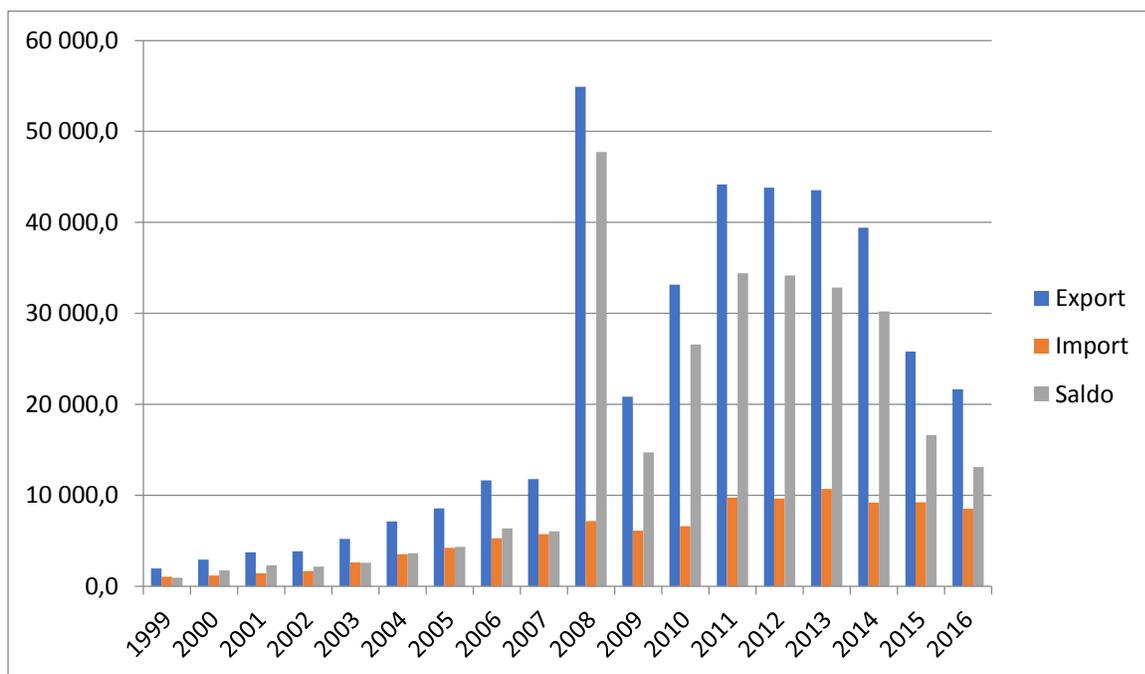
## **Trade**

As a part of state economic diversification strategy government attention is turned to reduce export and import dependency from other countries. Under USSR trade related export was nearly invisible- commodities were exported to other union member countries. Especially after signing Contract of Century in 1994, trade export structure has shifted from agrarian sector products to oil and gas resources export. In the next period structure of trade improved as a result of capital inflow from oil and gas revenue. Other economic sectors grew fast and range of export related sectors widen.

However, in the first few years of independence overall trade volume decreased sharply as a result of economic instability, it increased sharply in the second part of decade. State reforms on import and export showed its affect positively and there is positive trade saldo after 1999 (except small negative saldo in 2003).

In 2008 main share of trade was based on oil and gas sector and sharply increasing commodity prices and extraction of oil in the global market directly influenced to our export and volume of export increased drastically. After 2010 oil and gas prices decreased gradually, decreasing Azerbaijan`s export revenue paralelly.

**Figure 18. Export, import and trade saldo of Azerbaijan (mln manat)**



Source: Statistics Committee of the Republic of Azerbaijan

According to statistical data, in 2015-2016 changes in commodity market prices has affected to Azerbaijan`s export differently. Decreasing oil and gas prices declined revenue sourced from these commodities. For example, total export of crude oil, natural gas and oil products declined 27%, 36%, 45% respectively, however this decline is followed by the increase in different industrial goods` export- aluminum and aluminum products- 14%, electricity 64%, ferrous metals- 177%, copper and copper products- 97%, lead and lead products- 370%, land transportation vehicles and machineries- 636%, nonprecious metal products- 129%.

In agricultural and processing sector export increased in fruit (11%), vegetable (41%), cotton yarn (25%), food residue (100%), whereas there is slight decline in export of tea (68%), tobacco (5%), alcoholic beverages( 27%), sugar (70%).

## Policy suggestions

Economic and political stability provides opportunity for sustainable development. Current oil, gas and other natural resources and Azerbaijan`s strategic geographic position pave new perspectives for economy. Using these advantages Azerbaijan

can utilize its capacity for diversification purpose. The following areas are perspective fields where economy can focus:

**Big logistic infrastructures** with region countries serve for increasing trade operations. Azerbaijan`s transit role is as important as other factors. One of the potential future economic diversification strategy is creation of regional transit hub. Here big infrastructural investment is needed to expand capacity of railway, automobile, shipping, airport cargo transportation.

**Tourism** is another field which needs particular attention. However, there is big interest to tourism industry nowadays, both by government and private sector, but still there are some limitations which should be taken into account. Increasing tourism sector investment widen capacity of this sector. State tourism development programs can be effective tool to be used.

In 2015, national **currency devaluated** nearly 98% (in two shocks). It was predetermined economic change which was oriented to support to domestic producers. In this case export became more cheaper, but import became more expensive. With taking our several sectors` import dependency into consideration government can stimulate these sectors with additional incentives or government subsidies. Because if import is more expensive, then domestic prices will increase and domestic producers will lose their competitiveness in global market.

**Agricultural production** is still the second biggest export source. Taking into account agrarian sector`s role in employment and value creation it is not difficult to depict its importance for whole economy. Azerbaijan agriculture is characterized by low productivity. Different state programs were prepared to enhance growth in agricultural production, increase efficiency and productivity, enhance implementation of oversea developed countries` agrarian experiences in the field. Especially in the last decade, private sector invested big investment in hundreds of agricultural production oriented projects.

**Effective financial-credit system**, easy access for credit resources is necessary to improve business environment for small, medium and big enterprises. Better access for financial resources may create more softer business climate for entrepreneurship activities. In Azerbaijan there are dozens of financial sources which are ready to fund appropriate investment projects. For example, National Fund for Entrepreneurship Support is one of them which supports thousands of small, medium and big investment projects in different fields, from agriculture to service with low rate credit and financial tools. Additionally, banks and credit

unions are getting more interested in such a wide range business project investments.

Better **investment climate** can attract more foreign direct investment. Oil or non-oil sector FDI can create spillover effect for economy and surely will contribute to economic growth. Government policies should take all internal and external factors into account to create easy atmosphere for trade and investment

Government still keeps some of the public sector (state owned) companies in hand. Actually, they are **natural monopoly** and they are supposed to be privatized by private sector, then productivity and utility may increase in these specific sectors. Structural and institutional changes are necessary for improvement of these fields.

There is strong positive correlation between **human capital development** and economic diversification. Well developed countries, like Japan, Korea, Singapore, Scandinavian countries spend special attention to human resource development, that is a result of high government spending on education, science, R&D. For instance S. Korea was spending around one fifth of total Korean GDP on education in 1990s. Today this data in Japan is 3%, Sweden- 3.7%, United States- 2.8%. In Azerbaijan government spending on education is very low. R&D spending in compare of region countries is lower. Unemployment in Azerbaijan is not in a high rate (5%), that is why special attention should be spent on increasing skill level.

## **4. Methodology and results**

The overall purpose of this research proposal is to illustrate and give deep understanding on how Azerbaijan has diversified its economy to mitigate economic fluctuations. On the other hand given country cases bring comparative analysis and demonstrate diversification patterns in different resource-poor and resource-rich countries.

In this section of thesis fundamental and practical explanation of data collection is given based on research focus.

This thesis work is prepared based on quantitative, qualitative and daily data. Quantitative analysis of specific indicators may give clear understanding related to specific field. Main quantitative data is taken from international organization`s statistical and annual reports, internet resources, official statistics sources of Azerbaijan.

Quantitative information includes official statistics and measures published annually and periodically by official units and international organizations. Surely, quantitative and qualitative data should together be given to illustrate real case excessively. In some parts, quantitative information is not enough to demonstrate current situation and in this case qualitative approach is implemented. Qualitative information includes comparative analyzes of sectors, qualitative measurement. In some sections hypothetical approaches are used to specify the features of particular issues.

Daily data is data which is appropriately given to explain some specific issues and cases which does not occur in accordance with predetermined path of economic rules.

This research proposal is prepared based on primary and secondary information. Primary information is given by author`s point of view with past experience and ongoing research in the field. Mainly, primary data is got by analyzing given data. Secondary data is second hand data which is previously given by others and taken from different statistics sources, published official data, annual reports and scientific articles.

## **5. Conclusion and summary of findings**

In conclusion it should be mentioned that however most of the countries try to follow one of the effective way of development- economic diversification strategy with implementation of appropriate policies, but there are several known cases which failed on the way. Diversification of range of economic activities to reduce and mitigate potential future economic risks and fluctuations is needed for all nations, and different countries have varied preferences in long run strategy.

Depending on countries` economies and their specific features- resource poor and resource rich countries may follow different diversification pattern. Within diversification make country`s economy able to improve its particular sectors` capacity, quality and productivity. Out diversification creates new fields of activities which means new sources of revenue. In different countries` (Korea, Malaysia, Brazil) cases it is easy to observe how these changes and diversified approaches contributed to the growth of economy. In another hand, some countries have shown particular pattern in within diversification. For instance, Azerbaijan, Turkmenistan, Kazakhstan, Australia- they have improved and strengthened previously existed economic sectors (and some new activities).

Global practices show that most of the resource rich countries have not been successful on whole scale economic diversification. These is related to low quality revenue management, poor infrastructure, macroeconomic instability, less competitive domestic market and so on. However, for instance Malaysia has used its resource based economies as a force for diversification, but Chile has faced with unsuccessful experience and failed in diversification.

Korea, Malaysia, Norway are good example for successful diversification. Norway model of diversification shows how predetermined diversification focused revenue

management can secure whole economy. Korea has totally created new role model with nearly collapsed economy. Its development strategy is considered as one of the brightest example.

When it comes to diversification of Azerbaijan economy, this case is a bit complex. However, whole economy has experienced significant decline in early 1990s, but domestic and foreign direct investment to the economy fueled economic growth. Some experts think that this economic growth started from growth in oil industry and then stipulated other sectors. Government intervention to private sector with different tools was necessary in some stages. For example, first and second privatization waves of public sectors created new competitive fields. Level of domestic and foreign private investment went up. Like a chain effect it directly and indirectly influenced on growth of other sectors.

Previous primary sector dependent Azerbaijan slightly shifted to other sectors- industry and service sectors became main base for economy. Structural transformation created new opportunities for domestic and other players, motivated them to be involved in economy. Income level, employment in the economy, volume of export-import operations increased gradually. Economy has seen great improvement in export diversification, import substitution, poverty reduction, private sector investment.

When nearly whole economies faced with global economic crisis in 2008-2009, Azerbaijan has shown positive economic growth. It was mainly due to well managed budget and revenue management system. Gross domestic product (GDP) per capita increased gradually, which determines increasing welfare.

In early 2000s, the role of oil and gas industry was going up, and in this case several steps to avoid risks in economy were needed. Government started to

implement several state programs and policies to adapt market to international growth pattern. Economic sectors started to be strengthened. New opportunities are brought for private sector. Government support to private sector helped small and medium enterprises to increase their role in the whole economy. They started to deal with various activities in agriculture, tourism, construction, financial sector, non-oil industry and other fields.

All these policies and programs helped economy to mitigate unpredictable market slow-downs. Special attention to export diversification strategy gave its positive output. Export oriented production expanded in numbers of sectors. It enabled local market enter to global market arena which brings foreign capital inflow.

One of the countries` development criteria of World Trade Organization is determination of how country can substitute its import. Azerbaijan has achieved big success in dozens of directions to replace its foreign imported goods and services with domestically produced goods and services.

Despite of some counter arguments about less diversified Azerbaijan economy, but in compare of two decades ago economy has shifted significantly to another direction and today this is visible in all the sectors. Well managed oil reserves and oil revenues in all sectors of economy enabled economy diversify. It does not mean diversification of economy is in high level, there is still some ongoing issues in natural resource based development, but economic diversification has brought bulk of advantages and benefits to whole economy until now and it is believed to continue to bring new opportunities in long-term development.

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