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**Effectiveness of fiscal policy in oil-rich countries: the case of
Azerbaijan**

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ABSTRACT

Fluctuations in energy prices can pose a threat to the economic stability and growth targets of resource-rich countries. It becomes inevitable for the country to face macroeconomic problems when the state does not use its fiscal policy effectively, the budget is dependent on oil and natural gas revenues, efficiency in production, and therefore the efficiency in tax policy cannot be achieved. As seen in the case of Azerbaijan, state investment projects and the steady growth and development of the economy depend on energy prices. How the stability in the economy can be achieved regardless of oil prices has been accepted as the main question of the thesis subject.

Keywords: Public Budget, Fiscal Policy, Oil Revenues, Economic Stability, Azerbaijan

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INTRODUCTION

Fluctuations in oil prices seen in the world markets from time to time cause consequences such as the contraction of the economy and sharp declines in public revenues for the countries that are rich in oil and at the same time whose economy is dependent on these natural resources. On the other hand, since the state does not use its own financial functions effectively, that is, the state budget is highly dependent on direct transfers from the oil fund, it may be impossible to achieve stability in economic growth from time to time, since efficiency in production and therefore inefficiency in tax policy cannot be achieved. The steady growth and development of the economy, as a result of state investment projects, is dependent on energy prices can be seen in the case of Azerbaijan. The declines in energy prices caused the destabilization of both public revenues and the economy. The insufficiency of domestic savings, as well as the realization of investment projects depending on external resources or debts caused the debt burden to increase.

In such a case, the steps taken towards achieving long-term growth and reducing poverty are likely to be continued under more difficult conditions. In the statements of the spokespersons of the government, it was clearly stated that a period of recession started in terms of the current contraction in the economy of the country, the growth of the current and budget deficit, the continuation of dollarization and the decrease in foreign exchange inflows to the economy. The narrowing of the credit portfolio of the banks, the decrease in GDP and the increase in inflation rates seriously threaten the stability of the country's economy in the short and medium terms. How stability can be achieved regardless of oil prices in a country whose economy is largely dependent on the energy sector has been accepted as the main question of the thesis subject. The subject of this thesis, which has been researched, is how the economy developed within the framework of growth and the way the state's fiscal policy followed by years, based on the example of Azerbaijan, by making use of world experience. In addition, the share and effect of oil production in the economy, how the efficiency of fiscal policies is ensured as a result of price fluctuations, how the state budget maintains the stability of the economy after the decreases in energy prices, and what kind of policy should be followed in order to ensure efficiency in the fiscal policy of the state will be investigated. Alternatives will be examined for the steady growth of the economy of developing oil-rich countries such as Azerbaijan, and the implementation of an effective fiscal policy on public revenues and expenditures without being dependent on the energy sector. This will help to develop

tools for the effective use of the country's social responsibilities and financial functions by drawing a new path. In addition, the recent sharp declines in energy prices in the world economy and the resulting financial disturbances in oil-rich countries reveal the importance of the subject we are dealing with.

CHAPTER I

NATURAL RESOURCE WEALTH AND ECONOMIC DEVELOPMENT

1.1 Oil Revenues in Resource-Rich Countries: Fiscal Policy and Economic Development

The public budget is one of the most important tools that enable the state to act in line with its own goals. For example, what investments will be made to ensure public health, provision of educational services and poverty alleviation, and how much will be the total cost of these investments, which fiscal policy to follow, are among the most important tools used to make effective decisions. Considering the structure of the general public budget revenues of developed countries, it is seen that the tax revenues have a large ratio and this rate changes around 65-70% on average.¹ The revenues from natural gas, oil and mineral revenues have an important part in the public revenues of the underdeveloped and poor countries with resource richness. Considering that natural resources are not evenly distributed throughout the world, finding such resources in underdeveloped countries is considered to be the most important asset. Considering the history, it is seen that there are examples of countries that were rich in natural resources in the 1800s, and some oil-rich countries in the 1900s, when compared with countries that were deprived of natural resources. While there are examples of positive effects of having rich natural resources on economic development, there are also opinions that such wealth is not a factor other than temporary wealth in fact. When examining the differences of today's countries with a modern economic structure, there are some which are rich in resources such as Russia, Iran, Brazil, Mexico, Nigeria, Ghana, Azerbaijan, Kazakhstan and some which lack it, such as Ireland, Italy, Finland, Japan, Switzerland.² Although it is seen that having a wealth of natural resources has a significant contribution to the production of gross domestic and national product in the short and medium-term periods or causes an increase in welfare, sudden shocks in world energy prices increase the welfare level in these countries in the long term and it has a negative effect on economic stability. The fact that countries rich in natural resources are faced with such a result indicates that economic

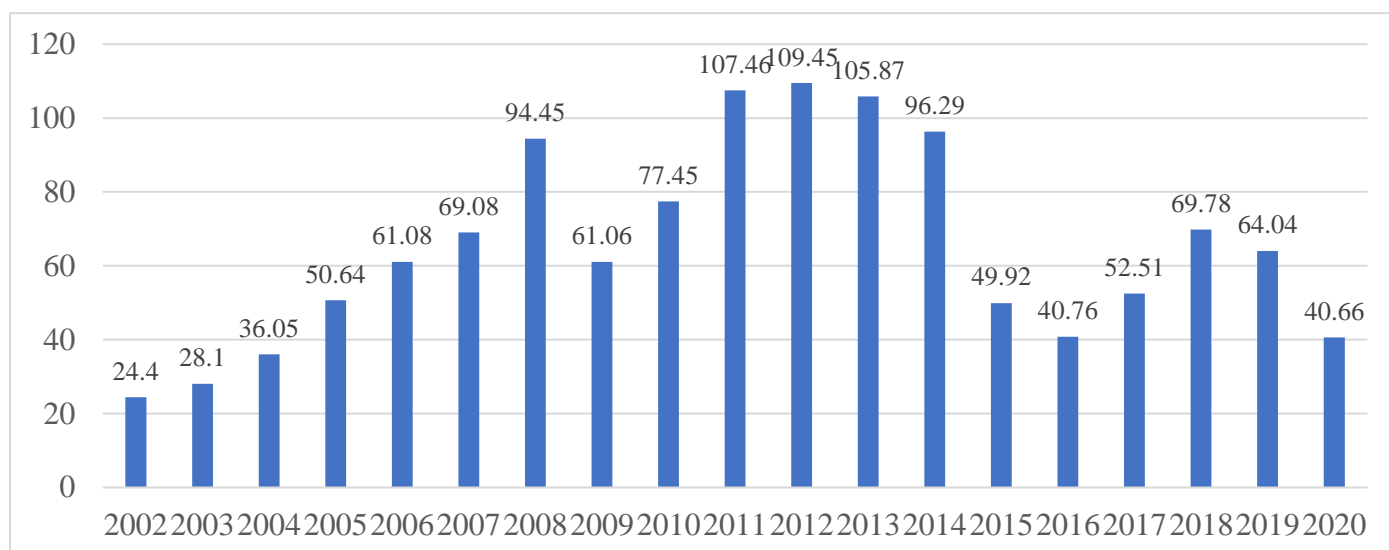
¹ Shultz, J. (2004). Follow The Money – A Guide To Monitoring Budgets and Oil and Gas Revenues, Open Society Institute, New York, p.7

² Bal, H. (2015). Economic Development and Natural Resources: A Study in Transition Economies, Chukurova University, S.B.E., <http://sbeski.cu.edu.tr/dergi.asp?dosya=772>, p.90

and fiscal policies are not implemented rationally and effectively on time. A large part of the foreign exchange earned by an oil-rich country from exports directly falls to the government's share, and the government, which has the authority to decide on these revenues, applies its own fiscal policy by using them for its purposes. However, fiscal policies implemented with the income from oil exports may face many difficulties from time to time. How to follow an effective policy in fiscal planning and ensuring macroeconomic stability are problems that may arise in the short term, and one of the main difficulties in the long term is the policy of effectively monitoring the distribution of wealth between generations. The risks related to unexpected changes in macroeconomic parameters must be assessed and policy responses identified in advance, albeit in very general terms, of course. On the other hand, in order to eliminate the difficulties encountered during the implementation of fiscal policies, the policies implemented by the resource-rich countries institutionally include the policies of managing the income earned from resource exports in savings funds. In countries rich in natural resources, governments expanding their budget expenditures over time in order to pursue an expansionary fiscal policy may pose some risks such as inflation effect and failure of government to stabilize economic growth in medium and long-term periods. The fiscal policy of the state is the most effective factor on economic growth and development in developing economies that have oil richness. This policy is shaped in line with the decisions taken by the state on budget revenues and expenditures.³ Fluctuations in oil prices can significantly undermine economic stability in some countries with a transition economy, such as Azerbaijan, Russia and Kazakhstan.

³ Schinasi, G. (2006). *Safeguarding Financial Stability: Theory and Practice*. New York: IMF Publications.

Figure 1. Annual Oil Prices (USD / Barrel)⁴



In Figure 1 it is shown how oil prices changed between 2002-2015. It is seen that the oil price, which was 24.36 USD / barrel in 2002, reached the highest level in 2012 and reached 109.45 USD / barrel. However, the prices, which experienced a slight decrease in 2013-2014, showed a sharp decline in 2015, decreasing by 50% to 49.92 USD / barrel. Due to the COVID-19 pandemic the price of oil again dropped to 40 USD level. Looking at the relationship between economic growth and resource wealth, it is seen that there is a significant difference between countries with developed economies and transition economies. When we look at the oil-rich countries, the large foreign currency flows from raw material revenues and exports create a significant positive difference in the trade balance of the countries, thus increasing national income. There are many studies highlighting the negative effects of heavy revenue and exports of natural resources on economic development. Of these approaches, Bhagwati's immiserising growth theory⁵ argues that if the increase in real incomes is greater than the losses in foreign trade, then there is no problem, otherwise there is an impoverishing growth. Comparing the consumers of countries with industrialized countries and developing economies, Nurkse⁶ revealed that more natural resource revenue and exports should be realized in order to meet the increasing demand as a result of the

⁴ <http://www.opec.org/>

⁵ Bhagwati, J. N. (1987). Immiserizing growth, in *The New Palgrave: A Dictionary of Economics*, (J. Eatwell, M. Milgate and P. Newman, eds.), London: Macmillan

⁶ Nurkse, R. (1961). International trade theory and development policy. In *Economic Development for Latin America* (pp. 234-274). Palgrave Macmillan, London.

consumers in the second part countries wanting to use the same goods and services as the consumers of the first part countries. On the other hand, the effects of Myrdal and Prebisch⁷ on the economic development of the differences between the countries in technological development were examined. Since technology-based goods and services are produced in industrialized countries, there is no serious decrease in the prices of output, but the opposite is the case in underdeveloped countries. In a period when world oil prices are high, when the foreign trade balance between imports and exports is positive in resource-rich countries, foreign currency inflows into the country in a large volume due to foreign exchange flows. The excessive foreign currency supply in the country causes the domestic currency to become overvalued against foreign exchange. This creates an economic problem that will adversely affect industrialization in the country over time. Because, the stronger position of the domestic currency against the foreign currency causes the production costs of the non-oil sectors in the country to be high and therefore the goods to be imported have a competitive advantage compared to domestic production. This means, as time passes, the development of non-oil sectors in the country ceases and the economy with intensive natural resource production expands further.

1.2 Dutch Disease

The discovery of natural resources or excessive currency flow, as well as the export boom in any sector, lead to the risk of Dutch disease.⁸ Although Dutch disease has positive results at first, it is a phenomenon that negatively affects all macro variables in the long term.⁹ Natural resources are a potential source of prosperity because they are not evenly distributed on the earth. The Dutch disease first manifested itself in the economy at the end of the fifties of the twentieth century. In 1959, the Dutch Disease natural gas field was discovered in the north of Holland. Since 1960, mastered fuel deposits, increasing exports. There is a rapid development of the mining industry, which led to an increase in inflation and unemployment. The downturn in other

⁷ Ho, P. (2008). Arguing for Policy Space to Promote Development: Prebisch, Myrdal, and Singer. *Journal of Economic Issues*, 42(2), 509-516. Retrieved April 14, 2021, from <http://www.jstor.org/stable/25511336>

⁸ In economics, the Dutch disease is the apparent causal relationship between the increase in the economic development of a specific sector (for example natural resources) and a decline in other sectors (like the manufacturing sector or agriculture). The presumed mechanism is that as revenues increase in the growing sector (or inflows of foreign aid), the given nation's currency becomes stronger (appreciates) compared to currencies of other nations (manifest in an exchange rate).

⁹ Yigit, M. (2001) Dutch Disease. *Dumlupınar University Journal of Social Sciences*, 5,p.3

areas of production reduces the export of manufactured goods. In 1977, an economic phenomenon was talked about in the press. Dutch disease began in the Netherlands, gradually spread throughout the world. The emphasis of the articles pointed to the inability of the government to rationally distribute financial injections from the prosperity of the industry to the social sphere.

It is not easy to think that having rich natural resources in a positive way will affect the economy positively, and it is not easy to think that it can provide economic development automatically. Even the opposite results were observed. In many studies examining the economic performance of countries rich in natural resources, remarkable determinations are included in this respect and it is stated that being rich in natural resources may have negative effects. The term Dutch Disease is used in economics to explain these negative effects in the economy.

The Dutch disease concept was first used in 1977 in *The Economist*.¹⁰ This concept explains the fact that the two sub-sectors that are expanding and shrinking within the sector producing tradable goods are simultaneously present in the economy. In the case of the Dutch disease, it was assumed that there are commercial and non-commercial goods groups and that both groups of goods cannot be substituted among themselves. Trade goods are imported and sold in international markets as they are used in import and export, therefore international markets determine the price of commercial goods. Non-commercial goods are determined in national markets. When classified in another aspect, three sectors come to the fore. These are sectors based on natural resources (mining, natural gas, petroleum, etc.), trade sectors (agriculture, industry) and non-trade sectors (health, education). While the prices of the sectors subject to natural resources and the sectors subject to trade are determined in the international market, the non-traded sectors are priced in the national market.¹¹

The cause of the Dutch disease is that oil and other natural resources often do not create jobs for themselves and often exclude other economic sectors. The rise in oil prices causes a large amount of foreign exchange to enter the country, which also leads to the appreciation of the country's currency. The large amount of foreign currency obtained from oil and natural gas exports makes the country's money more expensive, and the country's competitive power in the foreign

¹⁰ <https://www.economist.com/the-economist-explains/2014/11/05/what-dutch-disease-is-and-why-its-bad>

¹¹ Vostroknutova E. (2010). Dealing with Dutch Disease, *Economic Premise*, 16, pp. 1-7.

markets decreases. At the same time, the valuation of the national currency negatively affects the situation in the domestic market by making import goods attractive. Exploring and exporting important resources such as oil and natural gas negatively affects the manufacturing industry and creates shrinkage in many domestic sectors, particularly in the industrial and agricultural sectors. Because of the increase in the value of the national currency, the country is becoming increasingly rich and dependent on natural resources.¹² The Dutch disease can occur in different ways. Shocks triggering the foreign exchange flow (the revival in the natural resource sector, the sudden increases in capital flows, foreign aid, etc.) generally lead to the appreciation of the national currency, the redistribution of production factors, the output of the manufacturing industry and the decrease in net exports.¹³ Natural resource-rich countries generally exhibit lower economic growth than countries with natural resource problems. According to Manzano and Rigobona¹⁴, there is an inverse relationship between the wealth of natural resources and welfare. There are discussions about the disadvantage of underground resources. The most important discussion within these discussions is shown below.

1. Natural resource prices are always subject to a downward trend in the international market.
2. High profit in the natural resource sector results in the exclusion of other sectors. This exclusion effect mainly covers the agriculture and manufacturing sector.
3. Fluctuations in the prices of this sector can cause significant problems in the national economy as a result of the determination of the prices of the natural resource sector in the international market.
4. Natural resource-rich income from natural resources is prevented by the government or by a particular elite to prevent the development of institutions.¹⁵

¹² Yardımcıoğlu, F. (2013). Dutch Disease in OPEC Countries: An Econometric Analysis of Oil Prices and Economic Growth. *Journal of Socio-Economics*, 19 (19). Pp.1-24

¹³ Magud, N. (2010). When and Why Worry About Real Exchange Rate Appreciation? The Missing Link between Dutch Disease and Growth. *IMF Working Paper*, WP/10/271, pp.1-33.

¹⁴ Manzano, Osmel & Rigobon, Roberto. (2001). Resource Curse or Debt Overhang?. National Bureau of Economic Research, Inc, NBER Working Papers.

¹⁵ Arezki, R. (2012). The Natural Resource Curse: A Survey of Diagnoses and Some Prescriptions in Commodity Price Volatility and Inclusive Growth in Low-Income Countries. 3

There are different opinions about the Dutch disease. According to Sachs and Warner (2001)¹⁶, the fact that there is a natural resource in a country and the share of the natural resource sector in the export leads to Dutch disease. They also argue that resource-rich countries tend to have high-price economies, and that these countries overlook export-driven growth. According to Lederman and Maloney (2002)¹⁷, the export of natural resources does not always adversely affect the economy and may even produce positive results. According to Tanja Broz and Dubravcic¹⁸ (2011), the excessive amount of foreign exchange coming from natural resource exports will increase the real wages within the country and result in de-industrialization and economic growth will be negatively affected. According to Matsen and Tovrik (2005)¹⁹, the use of resources with more savings is reducing the risk of Dutch disease. Furthermore, they argue that the revenues derived from the sale of resources should not be seen as income.

The classic economic model of the Dutch disease was developed in 1982 by W. Max Corden and J. Piter Neary.²⁰ This model is still accepted as the main model. According to the model, three conditions are required for the realization of the Dutch disease:

1. Increase in the share of the sector in the boom in exports;
2. Overvalued national currency;
3. Loss of competitiveness with the transition of other sectors to the booming sector.

According to the model, three sectors come to the fore in the economies of the Netherlands:

1. Natural resource or booming sector;
2. The remaining export products sector;
3. Products not exported.

¹⁶ Sachs, S. (2001). Natural Resource and Economic Development. *European Economic Review*, 45, pp. 827-838

¹⁷ Lederman, D. (2008). In Search of the Missing Resource Curse. *Economia Fall*, pp.1-58.

¹⁸ Broz, T. (2011). The Dutch Disease in Unwonted Places-why has Croatia Been infected while Slovenia Remains in good health? *South Eastern Europe Journal of Economics*. Pp. 47-66.

¹⁹ Matsen, E. (2005). Optimal Dutch Disease. *Journal of the Development Economics*.78(2), pp. 494-515.

²⁰ Corden, W.M. (1984) Booming Sector and Dutch Disease *Economics Survey and Consolidation*. Oxford Economic Papers, New Series. 36(3), pp. 359-380.

In the case of the Dutch Disease, products that are not exported while the sector booming are advancing in a positive direction. Economic changes likely to occur in countries with Dutch disease are as follows: ²¹

1. The appraisal of the national currency because of the excess foreign exchange obtained by the increase in the exports of the sector with the natural resource boom;
2. The loss of competitiveness of the manufacturing sector because of the appreciation of the national currency and the decrease of its exports;
3. Decreasing employment in this sector because of the contraction of the manufacturing sector, the attractiveness of other sectors and the flow of labor and capital;
4. The economy becomes mainly dependent on only one sector;
5. Unbalance between demand and supply in the country. The economy becomes dependent on imports.
6. Probability of global oil prices to cause shocks in the economy

The growth of profitability in the commodity sector leads to an increase in demand for easily redistributable produced resources. Growing demand for productive resources naturally leads to an increase in their prices. Most of all, the traded non-primary sector suffers from the increase in the cost of production resources, which, in response to cost increases, cannot increase the price of goods produced. This is due to the fact that the full analogue of this product can be purchased on the world market at a fixed world price. The profitability of the non-tradable sector may well grow as a boom in the commodity sector entails an increase in incomes in the economy, and, accordingly, a rise in the price of non-tradable goods, which can compensate for the increased costs. The consequence of a sharply increased supply of products of the mining industry will also be a change in the exchange rate of the national currency. In a favourable economic environment, a sharp increase in the export of raw materials leads to large inflows of foreign currency and, other things being equal, to an increase in the exchange rate. This causes a decrease in the efficiency of exports of other types of goods, especially industrial ones. Manufactured goods produced domestically become, due to the appreciation of the national currency and the cheapening of

²¹ Ibid: 361.

imported products, less competitive in the domestic market. Consumers are gradually switching to the acquisition of imported analogues.

In the long term, the secondary sector cannot compete with foreign goods. Its costs for capital and labor become higher due to a lack of investment (it itself cannot afford to invest because of the high prices, and foreign investments do not go there either). So, over time, apart from the price, the technological lag is growing, and the sector fades away.

It is worth adding that commodity markets are characterized by a special price volatility. This gives rise to strong macroeconomic instability. In the period of high prices, the rate of the national currency is strengthened and an exacerbation of the Dutch disease is observed. After a fall in prices, the trade balance worsens and the national currency devaluates, causing a surge in inflation. At the same time, a reverse structural reorganization of the economy, an accelerated growth of the production sector is being made. In other words, the country exporter of raw materials is constantly in a state of structural, regional and macroeconomic imbalance.²²

Most authors adhere to a negative assessment of the impact of the Dutch Disease effect on the country's economy. The problem arises of withdrawing and redistributing rental incomes, because the owners of the deposits themselves can assign them directly, while the incomes of the majority of citizens will decrease, or remain unchanged, or grow at a lower rate. To avoid high differentiation of incomes and the emergence of social inequality, the state should withdraw natural rent through taxes (including export duties) and fees for the use of state-owned subsoil resources. Unfortunately, nowhere else has it been possible to do this painlessly and effectively.²³

The economic impact of the Dutch Disease effect are the following:

Withdrawal and redistribution of rental incomes - The incomes of the majority of citizens will decrease, either remain unchanged, or grow at a lower rate. To avoid high differentiation of incomes and the emergence of social inequality, the state should withdraw natural rent through taxes (including export duties) and fees for the use of state-owned subsoil resources.

²² Gilmundinov, V.M. (2008). The Dutch disease in the Russian economy: sectoral aspects of manifestation, IVF. 12, p. 18

²³ Montes, M.F., and Popov, V.V. (1999). Asian virus or Dutch disease? Theory and history of currency crises in Russia and other countries

Imbalance of demand and supply of products - Therefore, an increase in demand for a non-tradable product leads to an increase in prices for it while reducing the release of the traded product and an increase in unemployment in the regions in which it was produced. In the whole country, this means a macroeconomic imbalance of the economy.

Instability over time - The development of large hydrocarbon fields often lasts for many years, and hence the structural crisis can be delayed for a long time, which contributes to stagnant unemployment and steady inflationary expectations. In the case of depletion of a natural resource deposit, a structural and monetary-financial crisis may begin, like “breaking up” from an addict requiring a “dose”.

Price volatility - In the period of higher prices, there is a strengthening of the national currency and, accordingly, the exacerbation of the Dutch disease. Following the fall in prices, a deterioration in the trade balance index, a devaluation of the national currency, which in turn provokes a surge in inflation, begins. The exporting country of raw materials is constantly in a state of structural, regional and macroeconomic imbalances. The problem arises of withdrawing and redistributing rental incomes, because the owners of the deposits themselves can assign them directly, while the incomes of the majority of citizens will decrease, or remain unchanged, or grow at a lower rate. To avoid high differentiation of incomes and the emergence of social inequality, the state should withdraw natural rent through taxes (including export duties) and fees for the use of state-owned subsoil resources. Unfortunately, nowhere else has it been possible to do this painlessly and effectively.²⁴ The Dutch disease is a phenomenon characteristic of industrialized countries with hypertrophied raw material exports, when the raw materials industry is stifling other industries, and income growth leads to an appreciation of the local currency due to the cheapening of foreign currency. The disease is exacerbated just with the greatest success, when the price of export goods swells.

With an abundance of natural resources and, consequently, enormous revenues derived from their exports, the population may experience a sense of false security and may dull attention to such critical elements of economic policy as free trade, the effectiveness of the bureaucracy,

²⁴ Hilaire, N. (2009). Dutch Disease, Oil and Developing Countries , December 2004 Lartey E. Capital Inflows, Dutch Disease Effects and Monetary Policy in a Small Open Economy. – Boston

etc.²⁵ Summarizing all the above, it can be done that the chances of starting civil wars and internal armed conflicts increase significantly. Economists Paul Koller found that for countries with one or two main resources used as the main export item (for example, oil or cocoa), they are 5 times more likely to face a civil war problem than diversified economies.²⁶

The Dutch disease has two major macroeconomic effects. These are the resource distribution and expenditure effect. When a natural resource is found in a country, the earnings boom in the natural resource sector in that country increases the marginal product of the factors employed in this sector. An increase in oil prices increases the demand for labor and capital in the oil sector. Having such a demand leads labor and capital from the manufacturing and service sectors to the oil sector. As a result, production and employment in the oil sector will increase. As the prices for the manufacturing sector are determined in the international market, the decline in production will not change the demand. The decline in production in the service sector will lead to excessive demand. As a result, prices in the service sector will increase. Real exchange rate will be valued with all these.²⁷

Another macroeconomic impact of the Dutch disease is the expenditure effect. Expenditure effect arises from higher oil prices resulting in higher wages and gains in the oil sector, and hence increased aggregate demand in the economy. In case some of these demand goes to domestic services, prices of services are increasing, while the prices of the other two sectors are determined in the international market. Increased demand for services leads to increased service supply. This situation increases the wages in the service sector. Such a situation will encourage manufacturing and oil sector employees to move into the service sector.

As a result, the combined effects on output and employment in the oil sector and the service sector are uncertain. The reason for this is that the effect of resource allocation and the effect of

²⁵ Fetisov, G. G. (2008). Tasks of reducing the dependence of the Russian economy on commodity exports and economic policy alternatives , Problems of Forecasting. N 3.

²⁶ Chigrin, A.D (2010). It is unprofitable to produce: the consequences of the Dutch disease, p.3

²⁷ Magud, N. (2010). When and Why Worry About Real Exchange Rate Appreciation? The Missing Link between Dutch Disease and Growth. IMF Working Paper, pp. 1-33

expenditure are in opposite directions. Furthermore, there is a sharp contraction in the manufacturing sector. The relative increase in prices of services will evaluate the exchange rate.²⁸

In the last thirty years, countries that are rich in natural resources have a lower performance compared to countries that suffer from natural resources. If the natural resource sector has a great advantage in the export of any country, this country is more affected by this situation. There are many studies in the natural resource-rich country that these resources negatively affect the economy. The economic situation of the countries which are rich in natural resources in the 90s was examined by the World Bank in 2002. In total exports, per capita GDP per capita of the natural resource sector decreased by 0.7 percent in the 10-year period in countries with a share of 6 to 15 percent. In the same period, per capita GDP per capita in countries ranging from 15 to 50 percent declined by 1.1 percent. In countries with more than 50 percent, GDP per capita decreased by 2.3 percent annually on average.²⁹

If a country is based on a high rate of natural resource sector in exports, this results in a high level of poverty. As a result of this research, it is seen that the governments of these states are generally not successful in education and health sector. One of the other reasons is that a certain part of the revenues can be recorded in the country where the earnings boom in the natural resource sector is recorded. Revenues from the earnings boom in the natural resource sector are exceedingly high by the state. Another reason is the rapid increase in the prices in the natural resource sector and the downward trend of the country's economies negatively and weakening the institutions in the country at the same time.³⁰

At the center of the analyzes conducted in the basic model of the Dutch Disease, it was specifically aimed to determine the difference between the resource allocation and the effects of expenditure. In the case of a boom in the energy sector, this situation increases the marginal product of the factors employed in that sector and draws the moving production factors from the other sectors of the economy to the energy sector. This situation will result in various adjustments

²⁸ Oomes, N. (2007). Middle East and Central Asia Department Diagnosing Dutch Disease: Does Russia Have the Symptom? International Monetary Fund Publications pp. 1-34.

²⁹ World Bank, (2002), Treasure or Trouble? Mining in Developing Countries. Pp. 1-22

³⁰ Yuruk., M. (2008). The Curse of Resources: The Case of Russia. Trakya University Institute of Social Sciences, Published Master Thesis, Edirne. p-32

in the economy. The adjustment mechanism will work here through the real exchange rate. This is the resource distribution effect. The resource distribution effect shifts the labor demand curve of the energy sector to the right. The magnitude of the right shift of the labor demand curve will depend on the volume of the economic recovery. The increase in technological development or the price of the products of the revitalized sector will result in the same way: in both cases the demand for profitability and labor in the energy sector will increase at a certain wage level.

1.3 Transition Economies and the Dutch Disease

The basis of the concept of Transition Economies consists of countries that have moved from a centrally planned management system to a market economy system. The countries in question have made radical changes by moving from one economic system to another, which has no similarities in terms of many variables such as production, consumption, income, price, domestic and foreign trade, and resource distribution. High rates of inflation and unemployment seriously affected the social welfare of these countries. Later, these countries succeeded in mobilizing their economies as a result of using their natural resources, providing additional income in the state budgets and implementing social programs later on. Based on the above definitions of the Dutch Disease, it is seen that there is an economic structure bearing the characteristics of this disease in the example of Azerbaijan, which is one of the transition economies. Among the empirical analyzes on transition economies, Christoph B. Rosenberg and Tapio O. Saavalainen in their study on Azerbaijan in 1998, found that the excessive value of the national currency due to the intensive revenue and export of natural resources lead to the decrease in production in non-oil sectors. They evaluated the fact that the majority of exports (90%) consisted of petroleum and petroleum products as symptoms of the Dutch Disease.³¹ As a result, an economy built on oil was later shaken by the price shocks in the world markets. Since Azerbaijan is the main subject of the thesis, it will be discussed extensively in the second and last chapter. Now let's look at Dutch disease incidents in Mexico, Colombia and Russia as short examples.

Mexico. For most of the last century, Mexico was one of the largest players in the oil market. Several times Mexico even topped the list of countries in terms of production. Dependence

³¹ Rosenberg, C. B., and Saavalainen, T. O. (1998). How to Deal with Azerbaijan's and Oil Boom? Policy Strategies in a Resource-Rich Transition Economy, IMF Working Paper

on hydrocarbons threw it to extremes, then to the wealth of developed countries, when oil prices soared upwards to poverty and the transition to the list of emerging markets when they fell shatteringly.

Mexico reached its peak of security during the oil boom in the 1970s. Then its per capita GDP was quite comparable with the countries of Southern Europe. In 1981, when Brent's barrel cost was \$ 105 (at its current level), Mexico's per capita GDP reached \$ 3,524.7. But after the end of the oil cycle in the same year, the country fell into a recession and a year later declared a default. This was followed by the devaluation of the national currency - the peso and an extremely painful decade of reforms. If you look at Mexico today, it has passed the stage of intimidating oil dependence. Of course, it still has enough problems with the poverty level, and the peso is far from absolute stability - from December 2014 to the present day it has devalued by 23.7% - but the decline in the share of oil in the country's exports is shocking. Back in 1985, it accounted for 68% of export revenues, and by the end of 2014, already 10.8%.³²

How did Mexico succeed? In the late 80s, Mexico was forced to carry out reforms similar to those that are planned to be implemented in Kazakhstan. The reduction in budget revenues led to a total privatization of state assets in almost all sectors of the economy. Although this process was not very transparent, it decisively helped the economy go in the right direction. The money from the sale of assets was distributed across all sectors of the economy, to which foreign investment was added. It was one of the rare cases when the inertia of the state was rather a plus than a minus. Mexico's Pemex³³ state monopoly has been historically engaged in oil production in Mexico. The authorities have always had an overly zealous attitude towards the oil sector. They did not allow even local investors into it, let alone foreign ones. At the same time, the company almost always donated more than half of its revenues to the state budget. In 2013, the amount of income tax paid was a quarter more than the profit itself. Tax despotism left Pemex without funds for the exploration and purchase of new technologies. They were not even enough to optimize costs. This led to the fact that since the beginning of the 2000s, production in the country began to

³² Scherr, S. J. (1989). Agriculture in an export boom economy: A comparative analysis of policy and performance in Indonesia, Mexico and Nigeria, *World Development*, 17 (4), pp.548-549.

³³ Petróleos Mexicanos (PEMEX) is a Mexican state-owned oil, gas and petrochemical company. Founded in 1938. In 2014, it was the 10th largest oil company in terms of annual revenue and was ranked 36th in Fortune magazine's 2014 Global 500. The company is headquartered in Mexico City, Mexico.

fall, although the world was entering a new cycle of high oil prices. In 2003, Mexico produced 3.6 million barrels per day, and by the end of 2014, reduced volumes to 2.4 million barrels per day. At the end of 2014, in the structure of GDP almost 60% was occupied by the trade and services sector, and in the export 84.8% of the volume was accounted for the manufacturing industry. In 2009, due to the global crisis, Mexico experienced a shattering drop in GDP to -8.1%, but already in 2011 it showed a 4.5% growth and since then it has remained at an average level of 3.5%.³⁴

Colombia. Colombia, after Brazil, is perhaps the only country in the world that can affect coffee prices. The Coffee Producers Association, which was established in 1940 and was responsible for the management of the National Coffee Fund, initially functioned to purchase more production than the quota agreed with the US and Latin American countries. Therefore, the fund was not seen as a price stability instrument. It was mostly managed with Brazil to gain cartel power and market power. In 1958, with the dramatic decline in coffee prices worldwide, price stability became a function for the Fund.³⁵

In the context of the Dutch Disease, in addition to the oil producing economies, the Colombian economy, which mainly produces non-petroleum basic goods, will be taken into consideration. Studies have been carried out in accordance with the Dutch Disease theory in this country where agriculture sector in general and coffee production are of great importance. Between 1970 and 1983, the agricultural sector constituted 60% of real goods exports on average. In this period, 32% of agricultural production was coffee, 35% was other non-coffee agricultural products and 33% was livestock sector. Between 1970-1983, coffee exports on average accounted for 45% of total exports of basic goods. In this period, the increase in coffee prices increased the demand for domestic and non-traded goods and also caused the shift of resources employed in other sectors to the coffee sector. Since 1975, it has been observed that the peso of Colombia's national currency is valued at 30% in real terms. Higher coffee prices have led to higher export figures, resulting in the formation of large volumes of international reserves, and this phenomenon has increased the

³⁴ Usui, N. (1997). Dutch disease and policy adjustments to the oil boom: A comparative study of Indonesia and Mexico. *Resources Policy*, 23 (4), pp. 151 – 162.

³⁵ Cardenas, M. (1994). Stabilization and redistribution of coffee revenues: A political economy model of commodity marketing board. *Journal of Development Economics*, 44 (2), pp.355.

rate of expansion of monetary expansion led to the rise of inflation.³⁶In the same study, there was a boom in earnings in the drug sector, especially in cocaine and marijuana, and it was stated that the revenues obtained from this illegal activity were mostly kept abroad and did not affect the domestic consumption, but in the study, the revival in the coffee sector and public expenditures would appear more than it was in particular.³⁷

Another study of the economic recovery in the coffee sector between 1975 and 1980 mentioned the contribution of illegal activities to foreign exchange revenues. In 1975, the bad weather conditions in Brazil, the civil war in Angola, the earthquake in Guatemala, increased the prices by reducing the supply of coffee in the world markets. In May 1975, the price of coffee, which was \$ 0.66 in the New York market, jumped to \$ 3.21 in April 1977.³⁸

Since there are no separate and different price indices for the tradable and non-tradable sectors, the price indices of the products produced and consumed in Colombia are used to represent the price index of the non-tradable goods. According to this index, which does not include services sector prices, it is concluded that relative prices have increased. After 1975, during the revival years in the coffee sector, the price of domestic goods increased significantly. In 1980, this rate increased by 11% compared to 1970, which was considered the base year, and this was considered a symptom of Dutch disease. Sectors are divided into three categories according to their share of trade. It is observed that the sector that hosts the most goods subject to trade has contracted. This is considered as a symptom of Dutch disease.³⁹

International reserves, which were 448 million dollars in 1974, increased to 5633 million dollars in 1981. These reserves paved the way for borrowing and caused some problems. The Colombian economic authority was not been able to properly sterilize export revenues in the short term, and therefore, in the period of earnings boom, export revenues seem to affect the economy.

³⁶ Garcia, J.G. (1991). Agricultural prices and wages in Colombia: Impact of the coffee boom and government expenditures. *Food Policy*, 16 (1), pp. 23 – 25.

³⁷ *Ibid*, pp-25

³⁸ Kamas, L. (1986). Dutch disease economics and the Colombian export boom. *World Development*, 14 (9), p.60.

³⁹ *Ibid*,p.1180

In a study conducted with only the monetary sector in mind, it was observed that only moderate success was achieved in sterilizing coffee revenues.⁴⁰

This situation, which was emphasized before, stems from the fact that coffee revenues flow into the private sector. It can be easily seen from the examples given in this book that the public sector in oil exporting countries obtained a significant natural resource income through both state monopolies and taxes.

To sum up, in the Colombian economy, because of the rise in world prices of coffee production in the 1980s, it was seen that the spending effect and resource distribution effect existed with real exchange rate appraisal. It has been observed that with the private sector receiving a significant portion of the coffee export revenues, the expenditure effect immediately commences. While this makes difficult to manage the economic authority, it is seen that coffee revenues are relatively more sterilized in the medium term. Studies conducted in Colombia in the 1980s have concluded that the symptoms of Dutch disease are more dominant. Only recently, according to econometric analysis, did the coffee-centered boom in the agricultural sector not only adversely affect long-term GDP growth, but also gave Colombia a unique opportunity for economic development. Existence of unemployment had the effect of decreasing the volume of resource distribution effect.

Russia. Russia is a commercially attractive country when it comes to natural resources. Only proven oil reserves attract the attention of multinational companies with its qualified labor force and existing infrastructure, making up 6.4% of the world's total oil reserves and 74 billion barrels of oil.⁴¹

Thus, foreign direct capital attracted 27.8 billion dollars in 2007, mainly to the mining sector. In 2003, this figure was only 6.8 billion dollars. Foreign direct investment per capita increased seven-fold to \$ 369. This figure is quite high compared to other emerging economies.⁴²

⁴⁰ Otero, J.G. (2001). Coffee export booms and monetary disequilibrium: some evidence for Colombia. *Applied Economics*, 33 (2), p. 273.

⁴¹ British Petroleum [BP] (2008), *Statistical review of world energy*, p. 6.

⁴² World Bank [WB] (2008), *The World Bank in Russia: Russian economic report*, p. 5

Oil exploration and transportation investments should be made in order to maintain current production capacity. Therefore, between the years 2001-2030, the oil industry needs to invest \$ 328 billion.⁴³

In the case of Russia, it is seen that the expenditure effect is quite evident. When oil prices rose from less than \$ 18 in 1998 to more than \$ 90 in 2007, Russia became the largest crude oil producer and second largest oil exporter. In this context, when the relationship between high oil prices and nominal exchange rate valuation is examined, it is mentioned that there is a moderate rate of Dutch disease. The Oil Stability Fund was established in 2004 in order to mitigate the expenditure effect arising from the Dutch Disease. The Petroleum Stabilization Fund works according to the rule that if the oil barrel price exceeds \$ 20, the tax revenues of the oil sector will be transferred to the Fund and the Fund resources can be spent if the total volume exceeds 500 billion rubles. The assets of the Fund reached 43, 89.1 and 156.8 billion dollars in 2005, 2006 and 2007, respectively. Moreover, in 2005, when revenues exceeded 500 billion rubles, some of the resources were transferred to the pension fund for retirement.⁴⁴ Studies on Russia focused on real exchange rate appraisal and spending effect. In this context, it has been claimed that the appreciation of the ruble practically abolished the positive effect of the 1998 Russian devaluation in practice.⁴⁵

However, a study by IMF economists found that high oil prices led to a rapid appreciation of the exchange rate, but it was not possible to conclude whether it could be said whether it was an excessive real exchange rate valuation and therefore would indicate the Dutch disease. In the same study, it was interpreted that the lower performance of the industrial sector compared to the services sector may be the result of the transition effect. It is known that the resource distribution effect will occur if the factors have enough mobility between oil and non-oil sectors. In the case of Russia, because the oil sector employs a very small number of workers and low labor mobility, it is accepted that the resource distribution effect will not occur. The absolute and relative increase in the volume of the service sector indicates that the spending effect is more important than the

⁴³ International Energy Agency [IEA] (2003), World energy investment outlook, p.144.

⁴⁴ Merlevede, B. (2009). Russia from bust to boom and back: Oil price, Dutch Disease and stabilisation. *Comparative Economic Studies*, 51, p. 214 – 232.

⁴⁵ Latsis, O. (2005). Dutch Disease hits Russia. *The Moscow News*, <http://eng.globalaffairs.ru/engsmi/922.html>

resource distribution effect in the Russian economy. It has been argued that de-neutralization (lower growth of the industrial sector compared to the services sector) couldn't be accepted as a symptom of Dutch Disease, which may well be due to reasons of transition economy.⁴⁶

Although the growth rates of the industrial sector lagged behind the GDP, the industrial sector continued to grow. It is also claimed that the problems arising in the Russian industrial sector are caused by the structural characteristics of the sector rather than the Dutch Disease, resulting from the inflexible and limited market environment.⁴⁷

The fact that the industrial sector focuses on the domestic market more than exports and the labor costs are increasing in the sector can be mentioned as the reasons preventing the development of this sector. When assessing the real exchange rate, one should especially consider the following: Since the period 1990-1996 is the beginning of the transition period, the evaluation of exchange rate volatility within the context of the Dutch disease is wrong. From 1996 to 1998, Russia adopted a fixed exchange rate regime.

In 1998, there was a devaluation due to the economic crisis. Therefore, evaluating the Dutch Disease theory presents challenges specific to transition economies. Moreover, during the 1990s, the weak governmental structure in Russia led to failure in reforms and growth. The weak government structure and tight monetary policy have revealed an important phenomenon in Russia, as in several former Soviet Union countries. Until the exchange rate depreciation in 1998, the percentage of barter transactions in total sales was over 50. The barter transaction was so widespread that liquidity shortages stemming from tight monetary policy, high yields of short-term government bonds, price differentiation by natural monopolies, and artificially lowering the public budget deficit were effective.⁴⁸

Today, it is seen that the Russian economy, money supply has increased, and the exchange rate is evaluated at very low levels. While the share of the agricultural sector in GDP has decreased, international reserves have reached the level to cover approximately 20 months of imports.

⁴⁶ Oomes, N., and Kalcheva, K. (2007). Diagnosing Dutch Disease: Does Russia have symptoms?. IMF Working Paper, WP/07/102: pp. 1-32, p. 8-19

⁴⁷ Desai, P. (2006). Why is the Russian GDP growth slowing?. *The American Economic Review*, 96 (2), p. 347.

⁴⁸ *Ibid*, p.49-50

Although relatively low growth rates of agricultural production, low exchange rate appraisal, increasing M2 money supply, Dutch Disease theory are the variables that need to be analyzed, it is clear that these developments will not be sufficient empirical evidence for the existence of Dutch disease.

In conclusion, when the Russian economy is evaluated in terms of Dutch disease symptoms, it is seen that the studies conducted to date contain contradictory results. Lack of long time series for econometric investigations requires a more careful reading of the comments. On the other hand, while the resource distribution effect is insignificant due to the enclave structure of the oil sector and low labor mobility, it is seen that the expenditure effect is tried to be softened by the stabilization fund created by the foreign financial investments. Although the real exchange rate seems to be experiencing an appreciation, controlling the majority of the spending effect by the public sector prevents this effect from growing further. For the Russian economy, which has left behind the first 10 years of the transition period by waiting for legal arrangements to create an appropriate investment climate, it seems that the next period will gain more importance for the Dutch Disease. As a matter of fact, the relatively faster growth in the non-tradable sectors in recent years has made the structural change envisaged under the Dutch Disease theory more fluent in the economy.

1.4 Sustainability, Growth and Financial Rules

In resource-rich countries, as in other countries, macroeconomic stability, sustainability, economic growth and poverty reduction are included in the fiscal policy objectives. The biggest problem for these countries in order to ensure stability in fiscal policy is the inability to control the volatile and uncertain oil and natural gas revenues. In order to achieve economic growth, achieving macroeconomic stability is of great importance. At the same time, economic growth is the most effective factor in reducing poverty. There are empirical studies showing that macroeconomic fluctuations and uncertainties have a significant impact on economic stability and growth, poverty reduction and income distribution in the long term.⁴⁹ These effects make it difficult to implement stabilizing fiscal policies in developing countries with limited financial support. Uncertainties have

⁴⁹ Ossowski, R., and Halland, H. (2019). Key Aspects of Fiscal Management in Resource-Rich Countries. 10

negative effects on private investment. That is, when these (ie uncertainties) rise, the investor's risks also increase. Therefore, the investor may resort to reallocation of capital to accommodate drastic changes in demand and to cope with real exchange rate volatility. Thus, private investment is an important channel despite the negative effects of uncertainties and macroeconomic fluctuations on growth.⁵⁰ There is also empirical evidence that fluctuations in macroeconomics increase income inequality. Increasing income inequality over time has a detrimental effect on long-term economic growth. Thus, fluctuations cause the solvency deficit of households to increase due to the increase in inflation rates, fluctuations in public social spending and credit restrictions. The financial sector is sensitive and sensitive to macroeconomic stability. Permanent instability creates a barrier for the diversification of the economy and the development of the financial sector. Although one of the reasons for the negativities in the domestic economy is external shocks (from the perspective of resource-rich countries at this time, the decreases in energy prices are acceptable), ineffective fiscal policy may cause these shocks to deepen and an economic collapse. For this reason, fiscal policy, which has an important role in directing the revenues from the energy sector to the domestic economy, is an important tool for macroeconomic policies to be implemented in the short term. If there are large fluctuations in public spending and market uncertainties in the economy, then additional costs arise regarding the efficiency and quality level of public expenditures. When the government takes steps to increase investment expenditures or other public expenditures, governing bodies should have the capacity to prepare, implement and control these policies. In the period when factor prices rise and the private sector reaches its highest rate during the growth phase, the costs faced by the public sector also increase. On the other hand, the large scale and rapid increase of public investment expenditures not only strains the production capacity of the construction sector, but also causes the prices of services produced in this sector to increase. As a result, sharp declines in energy prices and low access to financial resources cause reductions in public expenditure in resource-rich countries over time. In their 2013 studies, Kraay and Servén concluded that fiscal policy in resource-rich developing countries follows a line in line with cyclical fluctuations in energy prices. Periodic macroeconomic

⁵⁰ van der Ploeg, Frederick (Rick) and Poelhekke, Steven, (2010), The pungent smell of "red herrings": Subsoil assets, rents, volatility and the resource curse, *Journal of Environmental Economics and Management*, 60, issue 1

instability is observed in countries where fiscal policy is implemented depending on the energy prices in the world markets.⁵¹

In the study by World Bank, it is stated that there is a similarity in the fiscal policies implemented by the resource-rich countries. That is, there is a positive correlation between public expenditures and the rate of change of oil prices. Public expenditures also increased in 2009 and 2011, when oil prices increased, and public expenditures decreased in 2008-2009 and 2011-2013, when prices decreased. The decrease in oil prices by 50% in 2014-2015 caused a sharp decrease in public expenditures. Management and use of revenues from the energy sector in the short term may cause difficulties in coordination between monetary and fiscal policies. Fiscal policy plays an important role in this period:⁵²

a) If the government collects the oil revenues in national wealth funds or uses them on imports, then there is no monetary policy to be applied and the possibility of the domestic currency appreciation is limited;

b) As the second case, the liquidity ratio in the domestic market will increase if the government makes these resources available as placements to domestic financial institutions or makes use of the repayment of domestic debt. Directing resources to the domestic economy can have both economic growth and inflation effects. In this case, the steps to be taken by domestic financial institutions will have significant effects on the economy;

c) Public debt will be transferred from the government's balance sheet to the balance sheet of the Central Bank, if the government will pay its domestic debt using oil revenues and the Central Bank will provide liquidity for the government. The interest payments of the government will decrease, and the interest costs of the Central Bank will increase. In order to reduce excess liquidity in the financial sector, the Central Bank may increase the interest rates.

According to the statements of the International Monetary Fund (IMF), there is a positive correlation between public budget expenditures of resource-rich countries and commodity prices

⁵¹ Kraay, Aart; Serven, Luis. 2013. Fiscal Policy as a Tool for Stabilization in Developing Countries. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/16362>
License: CC BY 3.0 IGO

⁵² Halland, H., Nair, A. A., and Lokanc, M. (2015). The Extractive Industries Sector, World Bank Study, Washington, DC USA

in world markets.⁵³ Expansionary fiscal policy is applied when commodity prices rise, and when prices fall, contractionary fiscal policies are applied. Uncertainties on resource revenues should always be taken into account when preparing a fiscal policy and annual budget program in countries with economies dependent on resource revenues. Fluctuations and uncertainties are the biggest reasons that put the public finances of these countries at risk.⁵⁴ In the period when oil revenues increase, the social cost of the fiscal policy to be implemented by the government will also increase when the public expenditures increase and the revenues decrease in the following periods. Measuring fiscal stability in developed and developing countries is calculated as the ratio of public debt to gross domestic product in the medium term.⁵⁵ Performing a debt-stability analysis enables the sustainability of the fiscal policy implemented in the country in the medium term. Countries rich in natural resources but with limited financial reserves should take into account the non-renewable nature of natural resources when net assets are shown in the public balance sheet⁵⁶:
Net assets of the public sector = (Financial assets + Non-financial assets) - (Liabilities)

- Non-financial assets include petroleum and mineral reserves that can be generated by considering current technology and prices.

We can say that the first theoretical studies on fiscal rule were shaped by the debates on constitutional economics in the late 1970s and early 1980s. Constitutional economics disciplines the political authority in determining and implementing economic policies and ignores the preferences of the political power. Fiscal Rule is defined as practices that restrict and closely discipline fiscal policies by imposing certain quantitative restrictions on budget sizes at macroeconomic level. Within the scope of the fiscal rule, public expenditures, taxes, budget balance and borrowing level are priority variables that are closely monitored. While developing countries try to increase their fiscal credibility by providing fiscal discipline with fiscal rules,

⁵³ IMF, 2016

⁵⁴ Hemming, Richard. (2013). *The Macroeconomic Framework for Managing Public Finances*. 10.1057/9781137315304_2.

⁵⁵ Ossowski, R., and Halland, H. (2019). *Key Aspects of Fiscal Management in Resource-Rich Countries*. 10

⁵⁶ Halland, H., Nair, A. A., and Lokanc, M. (2015). *The Extractive Industries Sector, World Bank Study*, Washington, DC USA

developed countries use the relevant variables to make their fiscal performance that has reached a certain level sustainable.

Fiscal policy rules refer to permanent restrictions on discretionary fiscal policy practices through numerical ceilings or targets defined within the framework of certain indicators that have the power to measure fiscal performance. Restrictions imposed by fiscal policy rules aim to control the amount and composition of discretionary fiscal policy instruments such as budget deficit, primary surplus, size of debt stock, sources of borrowing, taxes, taxation authority, types of expenditure (e.g. personnel and transfer expenditures). These restrictions may have different bases such as government program, government declaration, constitution, law and international agreement. The design of appropriate fiscal rules in resource-rich developing countries is more complex than in other developed countries. The design of fiscal rules becomes complicated when fiscal policies are prepared for countries due to reasons such as the uncertainty of these incomes, their being consumable and their dependence on foreign markets. Application of fiscal rules and principles has been limited in resource-rich countries. While some countries target one variable, others target two or more variables. Fiscal rules are of two types: numerical and non-numerical rules. Numerical rules are restrictions on fiscal policy indicators. Non-numerical rules are restrictions on the formulation, approval and implementation of financial policies. There are the following types of financial rules:

1) Numerical Rules:

- Borrowing rules - prohibiting the state from borrowing from domestic markets and the Central Bank, limiting such debts to a certain percentage of public revenues and expenditures, and limiting the ratio of total debt stock to GDP;
- Equivalent budget rule - it can be in the form of equal incomes and expenditures of the budget, not allowing borrowing, or limiting the ratio of budget deficit to GDP to a certain rate.
- Spending rules - limiting the growth rate of nominal or real expenditures or setting a cap for such expenditures.
- Revenue rules - includes regulations on limiting the ratio of nominal public revenues to nominal GDP, limiting the increase of direct or indirect taxes, or allocating revenue surpluses.

2) Non-numerical Rules - These rules are aimed at improving the quality of the financial decision making and implementation process:

- Transparency
- Accountability
- Auditing of budget applications
- Multi-year budgeting
- Rules to be followed in the preparation and implementation of the budget;
- Additional budget restrictions
- Limiting open-ended applications in the budget implementation process

The consequences of applying fiscal rules may differ in resource-rich countries. While some were successful in applying flexible fiscal rules, in others, strict fiscal rule enforcement resulted in more complex performance problems. In general, the implementation of fiscal rules has yielded positive results in countries where there was fiscal discipline before.⁵⁷ For example, the reason for Chile's success is the reliability in the policies implemented, political determination and consensus among state institutions. Fiscal policy in Norway faces problems in the long term due to the declines in pensions, health expenditures and oil prices. Within the framework of the fiscal rule applied since 2001, restrictions were imposed on the fact that the Norwegian Central Government's non-oil deficits should not exceed 4%. This financial rule has been applied to achieve the following objectives:

- Intergenerational equality
- Ensuring stability in the short term
- Fighting Dutch Disease

The 2001 fiscal regulation has produced successful results for the Norwegian economy, they are:⁵⁸

- Keeping non-oil deficits under control,
- Keeping the fiscal policy away from the pressure of fluctuations in oil revenues

⁵⁷ Sharma, N., and Strauss, T. (2013). Special Fiscal Institutions for Resource-rich Developing Economies, Overseas Development Institute London, UK

⁵⁸ IMF, 2009

- Saving a large part of oil revenues
- It has had positive results such as preventing the real value of the domestic currency from increasing.

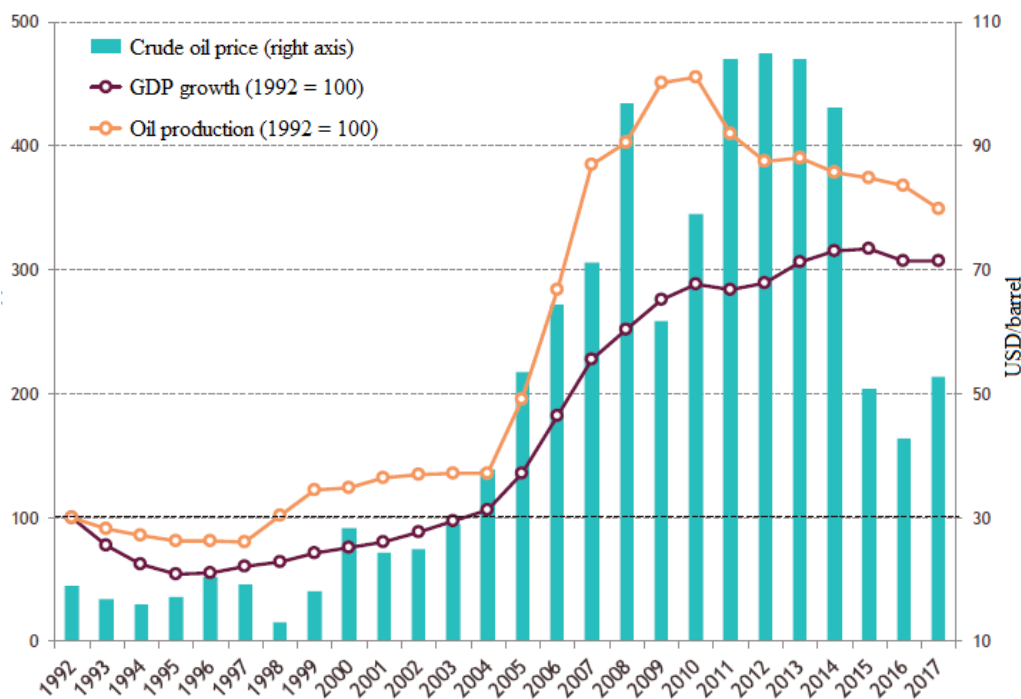
CHAPTER II

THE HISTORICAL DEVELOPMENT OF AZERBAIJANI ECONOMY AND THE PLACE OF OIL IN THE ECONOMY

2.1. Azerbaijan economy since independence

Azerbaijan is in an important position with its natural richness, centuries-old culture, a unique harmony of traditions and customs of different civilizations, as well as its geography. After Azerbaijan declared its independence, an independent policy was implemented to realize the sovereign rights in the economic field. The main purpose of this policy was to be integrated into the global economy by transitioning to the market economy and to provide organization in different areas of the economy. After the collapse of the USSR, Azerbaijan was among the post-Soviet countries that experienced the deepest economic crisis: in 1994, the reduction in real GDP in Azerbaijan amounted to 52.6% compared to 1990 (in Georgia-71.0%, in Armenia-62.4% , in Moldova-60.6%, in Tajikistan-53.8%).⁵⁹

Figure 1. Dynamics of Azerbaijan's GDP (1992 = 100), oil production * (1992 = 100) and average price of crude oil (\$ / bbl), 1992-2017⁶⁰



⁵⁹ Grigoryev L.M., Salikhov, M.R. (2007). GUAM - Fifteen Years Later: Shifts in the Economy of Azerbaijan, Georgia, Moldova and Ukraine, 1991–2006. Regnum,.

⁶⁰ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

Such a significant recession in the country was caused by the lack of its own wide industrial base and a high degree of specialization of the hydrocarbon economy, production (-18.7% in 1995 relative to the level of 1992) and export of which were reduced in the early 1990s. The outflow of the able-bodied population and the unfolding armed conflict in Nagorno-Karabakh⁶¹ (region of Azerbaijan) also played a negative role. In 1995-1997, despite small production volumes and low oil prices, macroeconomic stabilization was observed in Azerbaijan. It was the result of reforms in the financial and budgetary spheres, privatization, liberalization of foreign trade and attracting foreign investment in the oil and gas complex. In 1994, the first production sharing agreement (hereinafter referred to as the PSA) was signed with the involvement of Great Britain, USA, Russia, Norway and Turkey, allowing foreign companies to conduct exploratory exploration and field operations. The contract will be discussed in details in next sections. In subsequent years, this format of cooperation attracted dozens of foreign companies to the oil and gas sector.⁶²

According to the World Bank, incoming foreign direct investment increased from 10.8% of GDP in 1995 to 28.1% of GDP in 1997; the accumulation rate in the economy reached 34.7% in 1998 after 23.8% in 1995. Since 1998, the Azerbaijani economy has embarked on a growth trajectory that has accelerated markedly since 2004 during a period of rapidly rising oil prices. In 1998-2003, the country's GDP increased by 61.1%, while over the next 6 years, amid doubling the price of crude oil and increasing oil production by more than 3.3 times, economic growth amounted to 185.3%. Export deliveries of mineral fuels and petroleum products in value terms increased from \$ 3.0 billion in 2004 to \$ 46.4 billion in 2008. The accumulation rate in GDP in 2003-2004 reached 53–58%, which was ensured by large-scale investments in fixed assets from abroad. In 2001-2005, Azerbaijan was one of the three world leaders in terms of the ratio of incoming foreign direct investment to GDP (up to 55.1% in 2003). The growth rate of Azerbaijan's GDP as a whole in 2005-2007 significantly exceeded the growth rate of non-oil GDP.⁶³

⁶¹ Nagorno-Karabakh is located in the central part of Azerbaijan. During the Soviet era, the Nagorno-Karabakh Autonomous Region was established here, with an area of 4,400 km², or 5.1% of the total territory of the Republic of Azerbaijan.

⁶² Kuliev, R.A. (2007). *Transitional economy of Azerbaijan: some aspects of development*, Baku

⁶³ IMF: *Regional Economic Outlook: Middle East and Central Asia*, <http://data.imf.org/?sk=4CC54C86-F659-4B16-ABF5-FAB77D52D2E6&sId=1421768699479>

In 2004-2008, the average annual GDP growth of economies of Russia, Kazakhstan and Azerbaijan characterized by a high role of hydrocarbons was 7.1%, 8.4% and 21.1%, respectively. High resource carelessness and the attraction of foreign capital in the oil and gas sector allowed the Azerbaijani economy in 2001-2009 to grow much faster than the CIS on average. The period of high oil prices ensured the convergence of per capita income with the largest economies of the CIS: in 2009, GDP per capita PPP grew by more than 2.6 times to 15.7 thousand inter. dollars after 6.0 thousand int. dollars in 2003, personal consumption over the same period expanded more than 2 times. In 2005-2016, Azerbaijan was second only to Russia, Kazakhstan and Belarus in terms of GDP per capita in the post-Soviet space (without the Baltic states). Moreover, according to the World Bank, in 2007 Azerbaijan overcame the global average level of per capita GDP at PPPs and until 2015 annually surpassed the world economy by 13-22% in this indicator (by 3-6% in 2016-2017).

Table 1. The main macroeconomic indicators of Azerbaijan, 1994-2017.⁶⁴

	1994	1998	2000	2004	2006	2008	2012	2014	2016	2017
Real GDP,% of prev. year	-19,7	6,0	6,2	9,3	34,5	10,6	2,1	2,7	-3,1	0,1
GDP nom., Billion US dollars	2,3	4,3	5,3	8,7	21,0	49,0	69,7	75,2	37,8	40,7
GDP per capita at PPP, thousand int. dollars (2011)	4,1	4,1	4,8	6,4	10,8	14,6	16,0	16,9	16,1	15,9
Accumulation rate,% of GDP	1,9	34,7	20,7	58,0	29,9	18,7	22,3	27,5	24,9	21,6
Average annual inflation,%	1664,0	-0,8	1,8	6,7	8,3	20,8	1,1	1,5	12,6	13,0
Import (goods and services), growth,%	-24,0	4,9	0,4	-5,2	1,6	7,7	11,1	5,2	-3,4	-4,4
Export (goods and services), growth,%	-8,0	26,1	5,1	7,2	39,7	6,1	-1,4	-2,4	2,8	-7,3
Unemployment,% of labor	-	-	11,8	8,0	6,6	5,9	5,2	4,9	5,0	5,0
Population, million	7,6	7,9	8,0	8,3	8,6	8,8	9,2	9,5	9,7	9,8
The budget balance,% of GDP	-6,4	1,7	0,5	2,0	0,9	17,3	3,8	2,9	-0,8	-1,1
Government debt,% of GDP	-	14,3	22,8	20,0	10,5	6,9	13,8	14,4	50,7	54,1
Current account,% of GDP	-5,5	-31,9	-3,5	-29,8	17,6	33,6	21,4	13,9	-3,6	4,1

⁶⁴ IMF, Table 1, in addition to data for the most relevant 2014-2017 years, contains indicators for key years of economic development in Azerbaijan. 1994 is the first year in the IMF database after the collapse of the USSR, for which the most complete statistics are provided. The year 1998 was presented in order to demonstrate the intermediate results of the transformation of the country's economy. Some years of the first decade of the 21st century illustrate the acceleration of economic growth amid increasing production and high oil prices. 2012 shows the interim results of stagnation caused by a decrease in production volumes and the transition of the global economy to a phase of low energy prices.

The slowdown in the growth rate of oil production in 2008 to 4.6% (after almost + 42% annually in 2005-2007) caused a decrease in the GDP growth rate to 10.6%. A collapse in crude oil prices by more than 1/3 in 2009 and a decrease in the physical volume of exports of crude oil and petroleum products by almost 2/3 led to a three-fold reduction in the value of exports of oil and gas sector to \$ 13.6 billion in 2009. In the largest sectors, there was not only a slowdown in economic growth, but also a significant contraction in economic activity: manufacturing industries showed a decrease in value added by 12.6% in 2009, and construction by 8.2%.

During this period, the reduction of migrants' personal transfers, which traditionally provide a significant share of domestic consumption in most countries of the former Soviet Union, made a negative contribution. The reduction in personal transfers was due to the crisis in the Russian economy which, according to the World Bank, accounted for up to 60% of personal transfers to Azerbaijan. Nevertheless, the economy remained positive even during the years of the great recession (+ 9.4% in 2009, + 4.6% in 2010). Since 2011, the country has entered a zone of low growth rates: there has been a sharp decrease (-10.1%) in oil production due to problems with current repairs and delays in commissioning new wells. Even with a historically high oil price and non-oil GDP growth of 8.9% (mainly due to the construction sector), this led to negative GDP dynamics in 2011 (1.6%), which was the first decline in economic activity in the country since 1996 of the year. After 2010 (the year of the peak of production at the largest field), oil production returned to growth only in 2013 (+ 0.7%). Beginning in the first quarter of 2015, the manat depreciated: in connection with the fall in oil prices at the end of 2015, the national currency almost depreciated in half against the dollar. Consumer inflation in 2016–2017 reached 12.6% and 13.0%, respectively, which was the highest since 2008 (20.8%). The largest contribution to the negative dynamics of GDP was made by the construction sector, in which the value added in 2015-2017 decreased by 33% from the 2014 level as a result of a reduction in government capital expenditures and lending. In addition, the financial sector, which has been continuously expanding since 1998, showed a contraction of 11.3% in 2016. Non-oil GDP in 2016 decreased by 5.0%, showing negative dynamics for the first time since the 1990s. In 2015, personal transfers from Russia fell by 31.6% in dollar terms, and in 2016 the reduction amounted to 65.3% of the 2014 level. Government debt reached 50.7% of GDP in 2016 and 54.1% of GDP in 2017, after values close to 12% of GDP in 2005-2014. The current account balance became negative in 2015-2016 after positive values over the previous decade.

Since the late 1990s, the rapid increase in oil and gas production has led to corresponding changes in the sectoral structure. The main sectors of the economy of modern Azerbaijan are the mining industry, which provided in 2017 more than a third of GDP, as well as wholesale and retail trade, construction, transportation and storage. In 2017, agriculture and manufacturing in the sectoral structure accounted for 5.6% and 4.7%, respectively. In 2000-2004, the mining sector provided an average of about 30% of value added, in 2007 its share was already 53.7%. In 2000-2009, value added in the mining sector grew by almost 6 times. Large-scale expansion took place in the construction sector, which was due to infrastructure needs of the oil and gas industry in the early 2000s and significant export revenues in the second half of the decade. In 2000-2009, the volume of value added in this industry increased by more than 6 times, and the share in GDP ranged from 5.8% in 2001 to 12.5% in 2004.

During this period, the hotel and restaurant services sector also showed impressive growth (more than 8 times), transportation and storage (3.5 times), and trade (almost 3 times). At the same time, economic growth in the agricultural and manufacturing sectors lagged noticeably behind the national average. In 2010-2017, economic growth in most industries slowed down. The added value in the mining sector decreased in 2017 by 19.1% from the 2010 level. The largest growth was demonstrated by the hospitality industry (+ 146.2%), information and communications (+ 96.8%), trade (+ 68.5%), real estate activities (+59.8%). In the regional context, more than 70% of the country's gross domestic product produced in the country falls on the capital's economic region of Baku. However, its share is gradually decreasing from 80.2% in 2007 to 71.5% in 2017, which is primarily due to the outstripping growth rates of the Nakhichevan economic region. The added value created in the territory of this region over the past 15 years has grown by more than 14 times: within the framework of the state program for the socio-economic development of the regions (2004-2008), metalworking, automotive, food processing and other processing industries were established here.⁶⁵ The share of the Nakhichevan region in the country's GDP grew from 1.8% in 2007 to 4.4% in 2017. The economic districts leaders in terms of value added include Aran (8.3% in 2017) and Ganja-Gazakh (4.6%) economic regions. In 2016, oil and natural gas provided 72.1% and 27.4% of all energy generated in Azerbaijan, respectively. Oil and oil products, as well

⁶⁵ Karimov, P. D. R. (2015). Development of Non-Oil Sector in Azerbaijan: Tendencies and Opportunities //Journal of Business & Economic Policy. 2(2), pp. 39-52.

as natural gas predominate in the fuel and energy balance of Azerbaijan. The oil industry of Azerbaijan is one of the oldest in the world: industrial oil production began in the 1870s.

According to the IEA, in 2016, the share of oil and oil products together accounted for 32.6% of the total primary energy consumption in oil equivalent, the share of natural gas was 66.1%. In the structure of production, oil and natural gas accounted for 72.1% and 27.4% of all energy generated in the country, respectively. According to BP, the proven oil reserves in Azerbaijan for 2017 amounted to 1.0 billion tons or 7.0 billion barrels. (0.4% of world proven reserves), natural gas -1.3 trillion cubic meters. m (0.7% of the world).

Table 2. Energy balance of Azerbaijan, million tons of oil, 2000-2016⁶⁶

	2000					2016				
	Production	Import	Export	Change due to stocks *	Primary consumption	Production	Import	Export	Change due to stocks *	Primary consumption
Oil	14,1	-	-5,7	0,1	6,3	41,3	-	-35,1	^	4,6
Oil products	-	0,1	-2,1	-0,1		-	0,3	-1,7	-0,1	
Natural gas	4,6	0,2	-	^	4,8	15,7	0,3	-6,8	0,2	9,4
Hydropower	0,1	-	-	-	0,1	0,2	-	-	-	0,2
Solar / wind / other	-	-	-	-	-	^	-	-	-	^
Biofuel and waste	^	-	-	-	^	0,1	-	-	^	0,1
Electric power	-	0,1	-0,1	-	-	-	^	-0,1	-	-0,1
Total	18,8	0,4	-7,9	-0,1	11,3	57,3	0,6	-43,7	0,1	14,2

Coal which is one of the key sources of global energy, is not used in the economy of Azerbaijan. Moreover, the country is not only not producing it (including due to the fact that no prospective coal fields have been explored), but also there are no supplies from abroad. Azerbaijan also does not have nuclear energy, but a similar opportunity is being considered. At the 51st conference of the International Atomic Energy Agency (hereinafter - the IAEA), held in Vienna in September 2007, Azerbaijan submitted a proposal for the construction of a nuclear reactor in the country and received permission from the IAEA. In May 2014, after the creation of the National Committee for Nuclear Research, a tender plan was prepared for a 20 MW research nuclear reactor,

⁶⁶ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

as well as for the construction of a 2 kW training reactor. The construction of the first nuclear reactor may be completed by 2020.

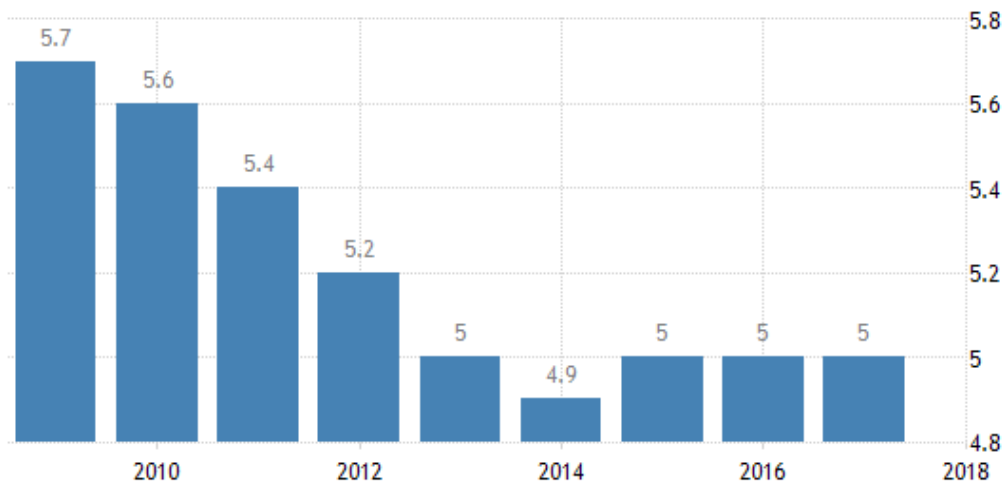
In the XXI century, Azerbaijan began to pay special attention to the development of renewable energy sources (hereinafter - RES). In 2004, the state program for the development of alternative energy was adopted, and in 2012 the State Strategy for the Use of Alternative and Renewable Energy Sources in 2012-2020 was developed. The key objectives are to increase the share of renewable energy sources in the expenditure part of the energy balance to 20%, as well as to reduce greenhouse gas emissions into the atmosphere by 20% from the 1990 level. The European Commission provides Azerbaijan 1 million euros for the development of alternative energy in the country as part of a program to support reforms in the energy sector. Several solar and wind power stations operate in the country, however, the share of renewable energy sources in the structure of electricity generation is still very small.

In June 2018, the Trans-Anatolian gas pipeline (TANAP) was opened, which leads from Azerbaijan to Greece via Turkey; however, it is planned that deliveries through the gas pipeline will begin only in the summer of next year, and according to some estimates, not earlier than 2020. TANAP throughput is estimated at 16 billion cubic meters. m per year (10 of which will be sent from Azerbaijan to the EU, and 6 to Turkey). Currently, Azerbaijan does not extract enough natural gas to meet all external and internal obligations (production in 2017 amounted to 17.7 billion cubic meters), therefore, in 2017, the State Oil Company of the Republic of Azerbaijan (hereinafter referred to as SOCAR) concluded an agreement with PJSC Gazprom for the supply of 1.6 billion cubic meters. m of Russian gas annually. In the future, Azerbaijan plans to increase gas production due to the Shah Deniz field, whose total reserves are estimated at 1.2 trillion cubic meters.

Unemployment Rate in Azerbaijan remained unchanged at 5 percent in 2017 from 5 percent in 2016. Unemployment Rate in Azerbaijan averaged 6.32 percent from 1991 until 2017, reaching an all time high of 11.80 percent in 2000 and a record low of 4.50 percent in 1996.⁶⁷

⁶⁷ <https://tradingeconomics.com/>

Figure 2. Unemployment rate in Azerbaijan 2010-2018⁶⁸



As a result of liberalization of foreign trade links, Azerbaijan established bilateral trade relations with a number of western countries (USA, Italy, France, England, Germany and others). Size of trade relations with CIS countries decreased since the expansion of trade relations with other countries. Azerbaijan has been an observer at the World Trade Organization (WTO) since 1997, and in 2004 began negotiations with the WTO members for participation. Under the WTO office, In 2016, Azerbaijan imposed high tariffs on a number of imported goods, including agricultural goods, in order to encourage domestic production and reduce the amount of imports. The countries where Azerbaijan signed a Free Trade Agreement are as follows: Russian Federation (September 30, 1992), Moldova (May 26, 1995), Ukraine (July 28, 1995), Turkmenistan (March 18, 1996), Uzbekistan (May 27, 1996), Georgia (June 10, 1996), Kazakhstan (June 10, 1997). Under the agreements, customs duties and other charges having equivalent effect shall not be applied in trade between these countries and Azerbaijan. Azerbaijan does not currently impose customs duties on imported goods from Russia, Georgia, Kazakhstan and Ukraine.⁶⁹

The table below shows the annual FDI inflows for the period 1995-2017 and their percentage distribution in the oil and other sectors. Starting in 1995, 65% of foreign investments turned to the oil sector. The total amount of foreign capital invested in 2016 was 10161.1 million dollars and 55.3% of the total direct investments were made in the petroleum sector.⁷⁰

⁶⁸ Ibid

⁶⁹ Shen, E. (2005). Republic of Azerbaijan Country Profile, T.C. Prime Ministry Undersecretariat of Foreign Trade, Export Development Research Center

⁷⁰ Petroleum Revenues of Azerbaijan, Baku, Ministry of Finance Publications, 2017

Table 1. The investment amounts over the period of 1995-2017⁷¹

Years	Foreign direct investments (Million, USD)	Oil sector (Million, USD)	Oil sector %	Other sectors (Million, USD)	Other sectors %
1995	375.1	139.8	37.3	235.3	62.7
1996	620.5	416.2	67.1	204.3	32.9
1997	1307.3	780.1	59.7	527.2	40.3
1998	1472	891.8	60.6	580.2	39.4
1999	1091.1	544.5	49.9	546.6	50.1
2000	927	546.1	58.9	380.9	41.1
2001	1091.8	820.5	75.2	271.3	24.8
2002	2234.9	1966.3	88.0	268.6	12.0
2003	3371	2972.4	88.2	398.6	11.8
2004	4575.5	4088.1	89.3	487.4	10.7
2005	4893.2	3799.9	77.7	1093.3	22.3
2006	5052.8	3422.3	67.7	1630.5	32.3
2007	6674.3	4003.3	60.0	2671	40.0
2008	6847.4	3350.7	48.9	3496.7	51.1
2009	5468.6	2412.7	44.1	3055.9	55.9
2010	8247.8	2955.3	35.8	5292.5	64.2
2011	8673.9	3407.8	39.3	5266.1	60.7
2012	10314	4287.8	41.6	6026.2	58.4
2013	10540.9	4935.2	46.8	5605.7	53.2
2014	11697.7	6730.7	57.5	4967	42.5
2015	10719.1	6622.7	61.8	4096.4	38.2
2016	10161.1	5617.4	55.3	4543.7	44.7
2017	9976.2	4900.8	49.1	5075.4	50.9

⁷¹ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

2.2 The Structure of The Sectors in The Economy and The Development Processes Between 1991-2020

The private sector holds about 80% of the gross output of the economy. In the industry the private sector produces more than 85% of the industrial products and services. The private sector holds the main part in construction too. Thus, this percentage changed between 72% and 90% during the last decade. Besides that, in the agriculture and trade activities the private sector almost produces all of the output. In the transport, the state sector was the leader in 2005 and 2006 with the more than 50% share. However, subsequently, this situation changed favour of the private sector with about 80%. Apart from these, the private sector operates with approximately 80% share in the communication.

Table 3. Share of the private sector in GDP, current prices of the previous years, as %⁷²

Indicators	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GDP total	77.8	81.0	84.0	84.5	81.2	81.7	82.5	81.5	82.5	81.9	81.2
Industry	84.5	87.5	90.3	89.9	85.9	87.4	88.1	87.3	87.4	86.1	83.0
Construction	90.4	81.8	77.3	87.0	76.1	72.0	75.3	76.0	84.5	84.3	84.5
Agriculture	97.8	96.9	99.4	99.0	99.2	99.7	99.3	99.4	99.4	99.8	99.8
Trade and services	97.8	99.3	99.0	99.1	99.0	99.2	99.7	99.7	99.8	99.8	99.6
Transport	37.5	46.1	76.8	82.0	75.4	75.3	78.1	77.7	77.1	78.5	81.7
Communication	80.2	79.6	80.3	72.9	80.4	78.6	76.3	76.6	76.8	80.0	81.0

Indeed, the mining sector produces the main part of GDP (Table 2). This share was 42%, reached to 53% in 2007 and held more than 40% of GDP between 2009 and 2012. It demonstrates that from 2013 to 2014 the share of the mining sector has decreased due to the reduction in the crude oil production. The construction sector has played the second largest role (increased from 9% to 12%). Not only these activities, but also the share of the trade (from 6% to 7.8%), financial and insurance (from 1.4% to 2.4%), tourism (from 0.6% to 2.2%) sectors increased respectively. In spite of these growth, the principal activities, such as agriculture (from 9% to 5%),

⁷² The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

manufacturing (from 6.5% to 4.8%), transportation (from 5.2% to 4.5%), information and communication (from 2.2% to 1.8%) lost their previous position.

Table 4. Production of the GDP by types of economic activity, percentage of GDP⁷³

Sectors	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Mining	42.20	50.86	53.66	52.73	42.39	45.88	47.96	43.06	39.17	34.62
Construction	9.00	7.71	6.44	6.98	7.17	8.10	7.95	10.06	11.61	12.54
Trade	6.07	5.37	4.94	5.48	6.69	6.42	6.30	6.67	7.13	7.88
Agriculture, forestry and fishing	9.09	7.09	6.70	5.60	6.12	5.52	5.08	5.14	5.37	5.27
Manufacturing	6.49	5.77	4.98	4.71	5.53	4.74	3.99	4.24	4.22	4.77
Transportation and storage	5.20	4.67	5.65	5.14	6.75	5.58	5.11	4.92	4.42	4.50
Financial and insurance Activities	1.38	1.33	1.51	1.77	2.14	1.16	1.37	1.97	2.17	2.40
Accommodation and food service activities	0.56	0.54	0.57	0.76	0.97	1.04	1.45	1.64	1.84	2.17
Information and communication	2.13	1.96	1.67	1.54	1.88	1.86	1.59	1.73	1.74	1.81

The development of non-oil sectors manifested itself in the small and medium-sized enterprise development program in 2002-2005, in the regional development programs covering 2004-2008 and 2009, in the food security program for 2008-2015. We can demonstrate the main purpose of the industrial policy of the state, ensuring sustainable and high growth rates in the industrial sector, improving the structure of industrial production and increasing efficiency. In order to achieve this goal, it is aimed to increase innovation and investment in the industry, to apply various incentive measures for the development of non-petroleum business sectors, and to expand the production of products for export rather than import. In these programs, more priority was given to these areas of industry:

- Development of the agricultural sector;

⁷³ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

- Expanding production diversity in machine building facilities;
- Supporting the chemical industry, especially reducing dependence on imports of chemicals, materials and finished products;
- Production and development of metallurgy industry, also based on modern technology, aluminum and pipe;
- Expanding the production of construction materials (gypsum, tile, adhesive, cement and cement raw materials) and encouraging exports to neighboring countries;
- Developing domestic production and encouraging export of food products (wine, meat and dairy products, confectionery, canned fruit and vegetable production).

Agricultural Sector. After Azerbaijan gained its independence, agricultural policy was more prominent. It was subsidized by the state for the machinery used in agriculture to be easily purchased by entrepreneurs. We can cite this as an example of the easy import of agricultural machinery into the country, and the sale of machinery to entrepreneurs and individuals by renting. Although in 2006, infrastructure-oriented public investments oriented to agriculture were 34 294 117 million USD, this figure increased to 143 117 646 million USD in 2007. Due to the 2008 financial crisis that occurred around the world, there was a decrease in the investments made in the agricultural sector. In 2008, 197 941 175 million USD investment was made, and in 2009, 156 823 528 million USD, that is, 41 117 646 million USD less investment was made. As a result of the government's support for the development of the agricultural sector, investments in the agricultural sector have increased from 2009 to 2013. Then, from 2013 to 2016, there was a decline in investments. We can show the economic difficulties and devaluation in 2015 as the reason for this decline. As a result of the strategic goals set for the development of the state agricultural sector since 2016, investments in the agricultural sector amounted to 449 647 055 million USD in 2018. One of the main priorities of the Azerbaijani government in the development of the non-oil sector was supporting the agricultural sector. The development of the agricultural sector was important for the following reasons:⁷⁴

- Ensuring the country's food security;

⁷⁴ Aslanli, K. (2013). Evaluation of Economy and Diversification of Exports, Law Press, Baku, p.62.

- The income source of an important part of the economically active population is the agricultural sector. According to 2018 official statistics, the number of people working in agriculture is 1,770,800, that is, 36.3% of the active population;

- It is an area with great potential for both export and economic diversity. The agricultural sector is the main source of either food products that go directly to the consumer (eg fruits, vegetables, eggs, etc.) or raw materials for the manufacturing industry;

The strategic objectives of the state regarding the development of the agricultural sector since 2016 are as follows:⁷⁵

- Strengthening institutional capacity to ensure food sustainability;
- Increasing agricultural production through the value chain;
- Improving agricultural financing mechanisms;
- Development of the agricultural production market and improvement of service provision;
- Development of science, education and information consultancy services system in the field of agriculture;
- Developing market infrastructure for agricultural products and facilitating the access of producers to markets;
- Environmental protection, sustainable use of natural resources and management of the effects of natural factors on agriculture;
- Increasing the effectiveness of state regulation in the agriculture sector and improving the business environment;
- Increased employment in the villages and increased welfare of the population.

Thanks to the capital of the Ministry of Economy Entrepreneurship Support Fund, a total of 570 projects have been implemented in the production of agricultural products and production of agricultural products in the first half of 2018. Development of the regions of the Azerbaijan Republic, sustainable social-economic development in the country is a successful result of the development strategy of the state. Fulfilling duties in the state programs adopted and successfully implemented in the field of regional development, as well as in decisions regarding additional activities regarding the social-economic development of the regions contributed to the sustainable development of the non-oil sector in the country.⁷⁶

⁷⁵ Strategic Road Map, (Online), <http://www.static.prezident.az/pdf/38542>

⁷⁶ Information on Use of Funds, (Online), <http://edf.gov.az/az/content/24>

In order to explain the importance of the agricultural sector, the total amount of production from this sector between 2003-2018 is shown in Table 5.

Table 5. Total production amount of the agricultural sector (million Manat)⁷⁷

Years	Plant products	Livestock products	Total
2003	807.0	643.5	1450.5
2004	874.8	697.9	1572.7
2005	988.2	856.6	1844.8
2006	1124.4	991.1	2115.5
2007	1726.4	1192.2	2918.6
2008	2084.9	1421.0	3505.9
2009	2106.0	1699.5	3805.5
2010	1999.2	1878.5	3877.7
2011	2339.8	2185.4	4525.2
2012	2458.2	2386.4	4844.6
2013	2629.6	2615.0	5244.6
2014	2449.4	2776.4	5225.8
2015	2761.1	2874.2	5635.3
2016	2577.2	3055.2	5632.4
2017	3019.0	3561.0	6580.0
2018	3186.0	3824.0	7010.0

As can be seen from Table 5, the income of the agricultural sector has been increasing over the years. If an income of 85,3 million USD was obtained from the agricultural sector in 2003, this indicator increased and reached 3,3 billion USD in 2015. In 2016, an income of 3.4 billion USD was generated. In 2018, as a result of the projects implemented by the state in the production of agricultural products and the production of agricultural products, the total income increased to 4.1 billion USD. At the same time, the earnings from plant and animal products are increasing over the years. In 2018, 1.9 billion USD from plant products and 2.2 billion USD from livestock products were collected in the agricultural sector. This development and growth in the agricultural sector also helped overcome the depression process in the country.

The industry sector. Since 2004, Azerbaijani industry has entered a new stage of development. As a result of the State Programs for the social-economic development of the regions, issues of special importance for industrial production have been addressed and the infrastructure of the industry has been significantly improved. Along with infrastructure projects, public investment has been directed to many production projects, oil and gas production,

⁷⁷ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/source/agriculture/>

development of petrochemical industries, alternative power plants and equipment, aluminum production, shipbuilding and defense industry enterprises. At the same time, a commercial investment environment was created in the country, and government participation in projects implemented by the private sector was ensured when necessary. The implementation of the oil and gas strategy has increased the opportunities for the creation of the financial resources of the country and thus the effective use of its existing industrial potential.⁷⁸

In order to expand the production in the country, efforts to establish industrial parks have been started. In this context, international best practices and application possibilities in the country were examined. Establishment of industrial zones in the country was determined by the Decree of the President of the Republic of Azerbaijan on the Establishment and Organization of Industrial Quarters dated October 8, 2014 numbered 288. The purpose of establishing an industrial zone is to provide favorable conditions for the development of small and medium-sized enterprises operating in the industrial and service sectors and to increase the employment of the population in the production and service sectors. The decree determined that the industrial area is an area with the necessary infrastructure for business activity and is used by small and medium-sized enterprises to produce products and services.

Industrial neighborhoods reduce infrastructure costs in the organization of production processes, strengthen cooperative relations and develop small and medium-sized enterprises. The organization and regulation of the industrial districts has been transferred to the Azerbaijan Investment Company by the president. 33 Model Regulation on Industrial Areas was approved with the decision of the Cabinet of Ministers of the Republic of Azerbaijan dated 13 May 2015, number 186, in order to regulate the issues related to creating industrial areas and conducting entrepreneurial activities there.⁷⁹ In 2018, 47.7 billion Manat industrial products were produced by industrial organizations and individual entrepreneurs operating in this field. Production in the non-oil sector of the industry increased by 9.1% and in the petroleum sector by 0.4%.⁸⁰

Table 6 shows the number of industrial factories in the country and the sectors in which they operate between 2003-2017.

⁷⁸ State Program for the Development of Industry in the Republic of Azerbaijan 2015-2020, (Online), <http://www.e-qanun.az/framework/28964>,

⁷⁹ Changes in the Industrial District Model Regulation, (Online) <http://www.e-qanun.az/framework/42454>

⁸⁰ In Industrial Production, (Online), <https://www.stat.gov.az/news/index.php?id=4089>

Table 6. Number of operating industrial factories, by property types⁸¹

Years	Total number of factories	Mining industry	Manufacturing industry	Electricity, gas and steam generation, distribution and supply	Water supply, waste treatment and production
2003	2.421	205	1.863	201	152
2004	2.439	209	1.877	202	151
2005	2.621	243	2.010	203	165
2006	2.732	299	2.053	211	169
2007	2.825	343	2.122	219	141
2008	2.887	340	2.149	222	176
2009	2.794	314	2.103	230	147
2010	2.650	311	1.909	226	204
2011	2.508	289	1.791	216	212
2012	2.514	289	1.795	215	215
2013	2.527	318	1.764	220	225
2014	2.534	322	1.762	223	227
2015	2.583	325	1.778	239	241
2016	2.561	298	1.775	239	249
2017	2.582	281	1.826	228	247

The industrialization process in Azerbaijan helps to stabilize the economy during the crisis period. It is the situation in which market activities have been stagnant for a long time, and the development of industrial sectors in order to reduce this recession has been extremely effective in economic development.

Service industry. After gaining its independence, the service market began to take shape in the country. This sector, which is predominantly related to trade, transportation, communication, banking, tourism and other sectors, has played an important role in the economy in recent years. The experiences of developed countries show that the complexity of the production processes and the demand for various services is constantly increasing. Its service areas include hotels and restaurants, laundry and barber shops, education and sports facilities, tourism companies, radio

⁸¹ Azerbaijan State Statistics Committee, Number of Operating Industrial Plants, (Online) <https://www.stat.gov.az/source/industry/>

stations, consulting firms, banks, construction industry, as well as educational and medical institutions, museums, cinemas and theaters. Practically all organizations serve the population.⁸²

2.3 Oil and natural gas sector in Azerbaijan economy

The State Program covering the period of 2005-2015 on the development of the fuel and energy complex was signed on the 14th of February 2005 by the order of the President of the Republic of Azerbaijan. The program aims the further development of the fuel-energy complex, which is extremely important in the economy and social life of the Republic of Azerbaijan, and to improve the energy supply of the population and economy. Since ancient times, oil has been a national treasure of Azerbaijan, it has been a direction that determines its development. After Azerbaijan became an independent state, the real owner of its natural wealth, resources were fully used for the interests of the country for the benefit of the people, friends and partners.⁸³ Azerbaijan has become a geopolitical center not only for oil and natural gas resources, but also for the positions of the USA, Europe and Asian countries in the Caspian Sea region. Thanks to the development of oil and gas resources and the implementation of enormous projects for export to the world markets, the Caspian region XXI. It has become one of the most important regions of the world in the century.⁸⁴

70% of the territory of Azerbaijan is rich with oil and natural gas deposits. Different data is available on various resources related to the country's reserves. According to SOCAR estimates, the volume of proven reserves in Azerbaijan is 18 billion barrels. According to the Ministry of Energy, the explored reserves are 13 billion. At the same time, differences in numbers are also visible in British Petroleum Statistics (BP) and US energy statistics. BP data is about 7 billion barrels in Azerbaijan, the US Department of Energy and these data were 4-13 billion barrels. In other words, Azerbaijan's oil reserves account for 0.7% of world oil reserves.⁸⁵

The result of a study conducted by the US state in 1997 is the Caspian Sea. In total, 173 billion barrels of reserves were discovered and estimated at sea. savunmaktadır. This is 9% of

⁸² Ehmedov, M. (2015). Marketing of Service Sector, University of Economics Printing House, Baku, p.6

⁸³ Abbasov, C., (1998). Economic and Social Geography of the Azerbaijan Republic. Baku State University Publications, Baku, p.78

⁸⁴ Allahverdiyev N., (1991). Economic and Social Geography of Azerbaijan Respublika, Publication of Education, Baku, p.58

⁸⁵ EIA, 2016

world oil reserves. This is your reserve of 3.6 billion barrels of the proven part and 26 billion barrels of the estimated amount. It belongs to the Azerbaijani part of the Khazars.⁸⁶

The main regions of Azerbaijan with oil reserves are Kobustan, Shirvan and Mugan regions. 48% of the existing reserves are located in the Khazar, 27% in Chur Arax 11% in the Absheron peninsula, 6.5% in Cuba-Syazen region That's all the reserves make up 91% of the total reserves in the country. This is in Azerbaijan. The distribution of oil reserves by depth is also different. The width of the deepest reserves are in the Caspian Sea. 27% of reserves are 3000 meters, 53% are 3000-5000 meters, and 20% - at a depth of 5000-7000 meters.⁸⁷

So far, 81 oil and gas fields have been discovered here, of which 54 are located in drylands and 27 in the sea. The total amount of fields within the State Oil Company of the Azerbaijan Republic is 1 m. 899 million tons. oil, condensate and 711.1 cubic meters of gas. The fields are divided into 2 locations such as in development and not developed according to their developmental characteristics. The list of developed fields includes 6 existing fields, which are currently inactive.

The number of unprocessed fields is 14, of which 8 are in exploration and 6 are in conservation to be processed later. Currently, 59 fields of the State Oil Company of Azerbaijan Republic are involved in the development. More than 50,000 wells have been drilled since the start of oil and gas production in Azerbaijan. At the same time, according to experts' calculations, the confirmed residual oil reserves in the fields are more than 2.4 billion tonnes, and the increase in the oil production and oil recovery ratio remains topical and priority for the country. The following is a summary map of the dry and offshore fields of Azerbaijan.⁸⁸ In 2016, Azerbaijan produced 29.33 billion cubic meters of gas. It is 29.72 billion cubic meters less than in 2015. The State Oil Company of Azerbaijan (SOCAR) produced 6.27 billion cubic meters of gas last year. It should be noted that in 2015 it was 6.87 billion cubic meters. Iran has started importing gas from Iran last year to eliminate domestic deficit.

⁸⁶ Ehmedov, M. (2003). Oil and Future of Azerbaijan. Political Aspects of Azerbaijan Oil. Baku. Baki Publishing House.: 150

⁸⁷ Koçman, Asaf, Aydin Ibrahimov (1994). Geography of Azerbaijan. Izmir: Ege University Faculty of Letters Publications.

⁸⁸ Bagirov BA, Oil and gas mining geology, ASOIU, 2011

billion cubic meters. SOCAR was planning to attract foreign companies to exploit the Umid field. But with the fall in energy prices, this plan was postponed.⁹¹

"Bulla-Deniz" - This field, which has been operating since 1975, was considered to be the largest gas field in Azerbaijan before Shah Deniz. According to calculations, there are more than 110 billion cubic meters of gas in this field. Since 1975, Bulla-Deniz has produced 62 billion cubic meters of gas, 12 million tons of oil and gas condensate. Gas production from the Bulla-Deniz field is expected to reach 1 billion cubic meters annually.

The "Absheron" field is located in the Caspian Sea, 100 km south-east of Baku, 25 km north-east from the Shah Deniz field. The area of this field is approximately 270 square kilometers. The Absheron field was discovered in 2011. According to calculations, the field has 350 billion cubic meters of gas and 45 million tons of gas condensate. In November last year SOCAR and French "Total" oil and gas company signed an agreement on Absheron block. This field will be extracted from 2021-2022. From 2025, or after that, gas production at the stable level is expected from the Absheron field. It is hoped that the Absheron field will generate 5 billion cubic meters of gas annually at a fixed level.⁹²

The first agreement on the development and production sharing of Azeri, Chirag and Gunashli (deep) deposits of Azerbaijan in the Caspian Sea was signed September 20, 1994. Later, this agreement was changed to the Contract of the Century. This agreement created many opportunities for foreign companies to sign new agreements in Azerbaijan. Since 1994, 26 agreements have been signed between SOCAR and foreign oil companies on the exploration, production and distribution of hydrocarbons.⁹³

Azerbaijan is known worldwide in this direction. More than billions of dollars have been invested in the country. Azerbaijan has also benefited from other oil related sectors in the development of its economy in the development process. There is great progress in the

⁹¹ <https://socar.az/socar/az/activities/exploration/umid>

⁹² <https://azengu.org/wp-content/uploads/2017/>

⁹³ Eminov, Z. (2002). Physical and Economic Geography of Azerbaijan. Azerbaijan Science Academy Geography Institute Publication, Baku, p. 45.

infrastructure and service sector in Azerbaijan. In addition, the effects of the oil industry on the economy of Azerbaijan can be listed as follows:⁹⁴

- During the implementation of the agreements, the infrastructure of the oil industry has been renewed and has revealed the new and strong infrastructure of the oil industry;
- Investments were made to flow to other sectors of the country's economy;
- Azerbaijan has access to new modern technologies;
- A large number of Azerbaijani businesses were established and services to foreign oil companies increase;
- Significant support has been provided in the development of the banking and insurance sector;
- An important layer of entrepreneurs working under the laws of the civilized society has been created;
- Budget revenues increased significantly due to taxes levied by foreign companies;
- Thousands of new jobs have been opened in various sectors and services.

Azerbaijan has contributed to the economy by making billions of dollars in oil sales, which will allow the implementation of large social programs, increasing salaries and pensions, and helping more poor families, war victims and refugees.⁹⁵

Important work was done to organize and develop oil trade effectively in Azerbaijan. However, new scientific and practical studies should be done to intensify the initiated work. Scientific and experimental achievements that have been internationally tested should be taken into consideration to ensure the development of oil trade. Therefore, the transition to a progressive business strategy that referred to internationally viable achievements in the republic during the transition period was essentially characteristic. Based on this principle, the country's rich hydrocarbon resources are based on a materialism factor and create new opportunities for the development of the relevant potential oil trade.⁹⁶

The economy of Azerbaijan declined in the first years of independence and the crisis continued to increase as a result of inadequate and irresponsible governance inherited from the USSR period. 1991 GDP and industrial production volume in the country decreased by 2 times,

⁹⁴ Ibid, p. 56.

⁹⁵ Ibid, p. 53.

⁹⁶ Ibid, p. 58.

total volume of agricultural products decreased by 40%, capital investments decreased by 3 times, and freight turnover decreased by 4 times.⁹⁷

Between 1991 and 1993, some work was done in the field of economic reforms, the Economic Independence Constitutional Law was adopted, the national currency was circulating, prices were liberalized, and the economic freedom and independence of enterprises were increased. However, most businesses were monopolized due to a shortage of goods in the country, and the national currency was very weak (more manats were required to buy USD), so purchasing power fell significantly. All this led to a sharp increase in unemployment in the welfare of the population. After Heydar Aliyev returned to the republic administration, radical changes began in the country's economy. A well-thought strategy was developed to revitalize the economy of the Republic of Azerbaijan and to ensure its independence in all areas, and this strategy was given priority to the oil strategy.⁹⁸

On September 20, 1994 “The joint development and production sharing of "Azeri", "Chirag" and "Gunashli"(deep water) deposits in the Azerbaijani sector of the Caspian Sea” was signed, which was later called the "Contract of the Century". According to this agreement, oil fields namely-Azeri, Chyrag, Guneshli were planned to develop. In fact, within this agreement Azerbaijan government gained a chance to develop relations with Western countries and in this way to avoid from Russia pressure. As a result of the contract, a consortium was created and the participant were followings: SOCAR (Azerbaijan) with 20% share, BP (UK) with 17.127% share, Amoco (USA) with 17.01% share, Lukoil (Russia) with 10% share, Pennzoil (USA) with 9.82% share, Unocal (USA) with 9.52% share, Statoil (Norway) with 8.563% share, McDermott International (U.S.) with 2.45 share%, Ramco (Scotland) with 2.08% share, Turkish State Oil Company (Turkey) with 1.75% share, Delta-Nimir (Saudi Arabia) with 1.68% share. This consortium was named Azerbaijan International Operating Company (AIOC). This 28-contract based on PSA (Production sharing Agreement), which means that oil company cover the costs of exploration and mining, then the oil company compensates its expenses from profit. The government can control whole property under the contract after finishing of the repaying period. 80% percent of oil revenues were received by Azerbaijan and 20% of the oil revenues were separated by countries in terms of the contract. In 1999 years, significant event was happened

⁹⁷ Ibid, p. 60.

⁹⁸ Aksoy, Ş. (1998). Public Finance, Istanbul, Filiz bookstore., p.78.s

among participated companies. Firstly, BP bought the USA Company AMOCO and increased its share in consortium to 34% and became operator of the project. Then, Lukoil sold its shares to Inpex (Japan) company, as a result share of companies changed slightly. Initially, reserves of these contracted oil fields were estimated approximately 511-640 millions of tons. Whereas, in 2007 it is accounted again and announced that oil reserves in Azeri Chirag Guneshli fields are 1 billion of tons. On the other hand, quality of Azerbaijan crude oil is considered one of the lightest oil in the world. The second PSA was signed with Western countries in order to develop Shah-Deniz field in 1996. Initially, big amount of oil reserves were expected from this field, after exploring significant volume of gas reserves were found. Overall reserves were estimated at 1.2 tcm of natural gas and 240mln t of gas condensate. BP, Statoil, Iranian OIEC, Russian-Italian joint company and TPAO were participated in new created consortium. The big share belongs to BP (25.5%) and Statoil (25.5%), Iranian and Russian companies and SOCAR follow them with 10% share for each. TPAO (Turley) with 9% share also participates in this consortium. This field was one of the important projects for Europe, because its geographical nearness makes transportation easy with compare to other Eurasia fields. All resources of Azerbaijan belong to the state according to the constitution and management of energy resources controlled by SOCAR. According to the Presidential Decree No. 200, SOCAR was created in September 1992 as a result of merger of two big Azerbaijan State companies, there were Azerneft and Azneftkimiya.⁹⁹

Table 7. Companies and states that signed the Century Convention¹⁰⁰

Country	Company	Share %
Saudi Arabia	Delta Nimir	1.68
Turkey	TPAO	1.75
Scotland	Ramco	2.08
USA	Mcdemott	2.45
Norway	Statoil	8.56
USA	Unocal	9.52
USA	Penzoil	9.82
Russia	Lukoil	10
USA	Amoco	17.01
UK	BP	17.13
Azerbaijan	SOCAR	20

⁹⁹ Aras, O. N. (2003). Economics of Azerbaijan. Baku: Eastern-Western printing house.

¹⁰⁰ Ibid

In general, as a result of the formation of a new oil strategy during the years of independence, the first phase of economic development (covering 1991-1995) was completed, and the second phase (1996-2003) began the process of macroeconomic stability and recovery. Implementation of the new oil strategy The third phase of the republic's economic development - the economic uprising began as a result of the large-scale oil pipeline operation.

Along with the annual increase in oil production, a serious change was observed in the direction and development of the industry. However, the strong oil and gas industry has influenced the development of other sectors of the country's economy. Undoubtedly, this occurred at the expense of oil revenues and the independence of the national economy increased. The main export pipeline project of Baku-Tbilisi-Ceyhan (BTC) called Three Legends of the Sea, the Biggest Project of the Century, the Greatest Arteries of Eurasia is an indispensable infrastructure target for the independence of the national economy of Azerbaijan. With the Baku-Tbilisi-Ceyhan Pipeline, Azerbaijan's oil has been reaching the Mediterranean since July 2006.¹⁰¹ Turkey's energy transit country which plays an important role in making Ceyhan oil transport, close to the center of Rotterdam levels of Western European energy market.¹⁰²

Map 2. Map of Baku-Tbilisi-Ceyhan and Baku-Supsa Oil Pipelines¹⁰³



¹⁰¹ Mustafa. H. (2007). Eastern Mediterranean Energy Center, Strategy, March 26, 3(143), p.15.

¹⁰² Veliyev, C. (2008). War Without a Winner, Strategy, 5(231), 2008, p. 9.

¹⁰³ <http://www.socar.az/socar/en/activities/transportation/baku-tbilisi-ceyhan-btc-main-export-oil-pipeline>

Baku-Ceyhan Pipeline, starting from Sangazchal terminal near Baku, via Georgia to Turkey by logging, Erzurum, Erzincan and to follow the Kayseri route ends in Ceyhan.¹⁰⁴ The total length of Baku-Ceyhan Pipeline is 1726 km. 550 km section of the pipeline passes from Georgia and the rest-1076 km passes through Turkey.¹⁰⁵ Table 8 shows the chronology of the development Baku-Tbilisi-Ceyhan Pipeline.

Table 8. Chronology of Baku-Tbilisi-Ceyhan Pipeline¹⁰⁶

<i>Istanbul Convention</i> (Azerbaijan, Georgia and Turkey) - May 1998
<i>Ankara Declaration</i> (Azerbaijan, Georgia, Turkey, Kazakhstan, Uzbekistan Heads of State - US Energy Secretary witness) - October 1998
<i>Istanbul Protocol</i> (Azerbaijan, Georgia and Turkey-US Representative witness) -April 1999
<i>Intergovernmental Agreement</i> (Azerbaijan, Georgia and Turkey Heads of State - witness US President) - November 1999
<i>Istanbul Declaration</i> (Azerbaijan, Georgia, Kazakhstan and President of Turkey - witness US President) - November 1999
<i>Host Country Agreement (Hga)</i> (Azerbaijan, Georgia and Turkey) - October 2000
<i>Government Warranty</i> - October 2000
<i>Basic Engineering</i> - November 15, 2000 - May 15, 2001
<i>Detail Engineering</i> - June 19, 2001 - June 18, 2002
<i>Details Engineering-Work Completion Certificate</i> - August 28, 2002
<i>Land Supply And Construction - Starting Notice</i> - August 29, 2002
<i>Land Supply And Construction - Official Starting History</i> - September 10, 2002
<i>Btc Foundation Ceremony-Baku</i> - September 18, 2002
<i>Contract Signing Ceremony Of Btc Turkish Part-Ankara</i> - September 20, 2002
<i>Btc Ceyhan Terminal Foundation Ceremony-Adana</i> - September 26, 2002
<i>First Oil Pumping Ceremony For Btc Line-Baku</i> - May 25, 2005

¹⁰⁴ Kenan, C. and Cemalettin, K. (1999). Azeri Oil Past and Present”, Eurasian Studies, p.117.

¹⁰⁵ Ibid, p.117.

¹⁰⁶ Cenk, P. (2007). New Dimensions of Energy from the Perspective of Turkey-US Relations: A Screenplay Essay on the Future of Iraq, Eurasian File.

Turkey's BOTAS International Limited BTC Pipeline serves as the Department of Business Enterprise.¹⁰⁷The shareholders of Baku-Tbilisi-Ceyhan Pipeline are shown in Table 9.

Table 9. List of BTC Shareholders (BTC Co.)¹⁰⁸

Shareholders	%
BP Exploration (Caspian Sea) ltd.	% 30.10
SOCAR	% 25.00
Unocal BTC Pipeline LTD	. % 8.90
Statoil BTC Caspian LTD	% 8.71
TPAO	% 6.53
ENI	% 5.00
TOTAL	% 5.00
Itochu Oil Exploration (Azerbaijan) INC.	% 3.40
INPEX	% 2.50
Conocophillips	% 2.50
Delta-Hess (BTC) LTD.	% 2.36

The Baku-Tbilisi-Ceyhan Pipeline will allow 50 million tons of crude oil to pass through in the future. Located at the center of the east-west energy corridor, connecting the Caspian and the Mediterranean, the BTC Pipeline contributed to the increase in socio-economic levels of the countries in which the pipe passes.¹⁰⁹ This project has been supported by the United States since it will free the West from dependence on Middle Eastern oil and will undermine the influence of the Middle East in this area. The realization of the BTC Line is of great importance for the US. The US aims to reduce Russian and Iranian influence by strengthening its control over the South

¹⁰⁷“100 million barrels of oil were exported from BTC Energy”, Year: 12, No: 5, 2007, p. 31.

¹⁰⁸ Ibid

¹⁰⁹ “The New Route of Energy Europe”, Energy, Year: 9, Number: 3, 2004, p. 15.

Caucasus and Central Asia through the pipeline, and to make the Caspian region a reliable and stable source of oil and gas.¹¹⁰

The last project on Kazakhstan's agenda to diversify export routes in energy policy is the Baku-Ceyhan (BTC) Pipeline. Turkey also closely related to the BTC Kazakhstan Attempts to connect to the port of Atyrau was accepted by Kazakhstan from the beginning. In one of the most important recent developments in energy cooperation between Turkey and Kazakhstan was signed between Erdogan Nazarbayev on May 22, 2006. This agreement is very important in terms of Turkey's Central Asian energy resources to work towards enabling investors to establish a Kazakh oil refinery on the Black Sea coast of Turkey. It is aimed that crude Kazakh oil to be brought to this refinery from Novorossiysk Port of Russia will be refined and put on the market. The pipeline, which is of such great importance, carries a great risk in terms of security. An explosion occurred at BTC Crude Oil Pipeline on the night of August 5, 2008. The fire safety debates on the BTC Oil Line passing through Erzincan-Refahiye also brought up the agenda. The absence of foam extinguishing system at the point of fire increased the damage. In case the electronic system is damaged, it is stated that the line can be re-commissioned for 4 months. Turkey, the daily loss from this event is 350 thousand dollars.¹¹¹ After the explosion, daily production was reduced from 850 thousand barrels to 250 thousand barrels. In response to this situation, BTC officials have begun to work on transporting oil to the international market through different routes. The three options that stand out in this context are as follows; Baku-Supsa (Georgia) and Baku-Novorossiisk (Russia) lines or by train. However, all these options will increase in the throat passage is not safe solutions for Turkey.¹¹²

Management and development of energy resources in Azerbaijanis are conducted by the Azerbaijan State Oil Company (SOCAR). In addition, SOCAR actively participates in Georgia, Turkey energy markets as an investor. The last years, SOCAR has been built the new relations with the 29 other Black Sea countries. Especially, petrol stations have been opened in Ukraine and Romania. SOCAR is involved in exploring and producing oil and natural gas in Azerbaijan. In

¹¹⁰ Ekrem, N. H. (2006). The Effects of Baku-Tbilisi-Ceyhan to China, Strategy, 3(114), p. 21.

¹¹¹ Ismail, A. (2008). Security weaknesses in the project of the century will cost high to Turkey, Zaman newspaper

¹¹²Gürhan, S. and Mehmet, S. (2008). Experts Explained: The Cause of the BTC Explosion Technical Failure, Zaman newspaper

2015, 164,000 b/d of oil, about 20% of Azerbaijan's total oil output was produced by SOCAR. And remain 80% was produced by international companies. SOCAR also operates the country's two refineries, runs the country's pipeline system, and it manages the country's oil and natural gas imports and exports. In addition, much of Azerbaijan's oil is marketed by the SOCAR's Geneva-based subsidiary, SOCAR Trading, which has been operating since 2008. In order to support macroeconomic stability, finance national social projects and accumulate some reserves to future generations, the State Oil fund of the Azerbaijan Republic (SOFAZ) was established in 1999. The president of the country directly has a control over the organization. According to 2015 report, total reserves of SOFAZ were about 33.6 billion dollar. These reserves actively invested in currencies and other financial assets.¹¹³

In 2001, the State Oil Fund of the Republic of Azerbaijan (SOFAZ) was established. After this all the profit from oil is collected here. The main purpose of the Foundation is to equitably distribute natural resources between present and future generations. Another important factor is the provision of macroeconomic stability and the protection of the domestic money market from the ever-increasing foreign exchange flow. Currently, 24,000 tons of oil is extracted daily in Azerbaijan. According to the forecasts, the total revenue from oil and gas production over 20 years will be about \$ 200 billion.¹¹⁴

On the other hand, Azerbaijan tried to sell natural gas to other destinations in order to ensure diversification of exports. In this way, Azerbaijan signed several contract with Russia and Iran. As a result of these contacts, about 1 billion of cubic metres (bcm) of gas exported to Iran per year since 2011 and 500bcm gas exported to Russia since 2010. Another important project between Azerbaijan and West can be considered the Trans Anatolia Natural Gas Pipeline (TANAP). First discussions were started between Turkey and Azerbaijan from 2011. Construction of pipeline initiated in 2015 and expected that will be finished until 2020. Capacity of the pipeline is planning to be 16 bcm of gas per years for 2020 and after six year the capacity will be increased to 31 bcm. After first stage completion, 6 bcm per year will be consumed by Turkey and the remaining 10 bcm will be transported to European countries. The pipeline will carry natural gas extracted from

¹¹³ Shakaliyev, A., and Shakaliyev, Q. (2016). Economics of Azerbaijan: Realities and Perspectives. Baku: Turhan Publishing House.

¹¹⁴ Ibid.

the Caspian Sea, particularly Shah Deniz 2 field across Turkey and then to Europe.¹¹⁵ Currently, the position and location of Azerbaijan as an oil and gas country are largely due to the fact that the work under the Century Convention is linked to the new renaissance in the oil and gas sector. Currently, about 2.7 million tons of oil and 1.5 billion cubic meters of associated gas are extracted from 80 production wells in Chirag and Azeri fields and Deepwater Gunashli fields. Another important fact is that SOCAR has become the largest oil exporter in the country by the end of the 90s of the last century, where the export of crude oil to Azerbaijan has increased more than ten times. Table 10 describes the oil production in the time span of 2009-2018.

Table 10. Oil production in Azerbaijan¹¹⁶

Year	SOCAR	Azerbaijan
2009	8543.3	50419.3
2010	8459.7	50795.5
2011	8400.9	45625.4
2012	8289.8	43389.8
2013	8314.9	43483.9
2014	8320.4	42022.7
2015	8160.5	41586
2016	7522.4	41034.5
2017	7427.1	38688.9
2018	7542	38814

As can be seen, the highest oil production in Azerbaijan belongs to 2010. The total production amount for Azerbaijan this year is 50795.5. This indicator is 8459.7 in SOCAR. The decline in production in the following years is related to the contracts signed for energy security. Today, approximately 2.7 million tons of oil and 1.5 billion cubic meters of associated gas are extracted from 80 production wells in Chirag and Azeri fields and Deepwater Gunashli fields. It should be noted that the crude oil exports of Azerbaijan to the world markets increased more than ten times, and SOCAR has become the largest oil exporter in the country compared to the end of the 90s of the last century.¹¹⁷ More than 95 percent of the oil produced in Azerbaijan is obtained from the sea. Azerbaijan produced 50 million tons of oil and 16 billion cubic meters of natural gas

¹¹⁵ R. Ibrahimov (2013). Energy and Azerbaijan: History, Strategy and Cooperation.

¹¹⁶ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>.

¹¹⁷ Ibid, p.60

in 2010. In 2017, Azerbaijan extracts less than 2 million tons of oil from the drought land. According to the data, the gross domestic product in the country reached 70,131.1 million manats in 2017. 37.2% of the value added (26 073.2 million manats) was produced in the oil industry, production decreased by 5.0 percent compared to the previous year.¹¹⁸ The number of enterprises operating in the energy sector in Azerbaijan in 2017 was 352. This figure was stated as 362 in 2016. The volume of goods produced in these enterprises is 25,438 compared to 2016 and 32,108 compared to 2017.

Table 11. Key Performance Indicators of Energy Industry Enterprises¹¹⁹

	2010	2011	2012	2013	2014	2015	2016	2017
Number of active companies	316	306	305	331	343	360	362	352
Volume of goods produced (works, services), million manats	24.127	30.777	29.573	28.747	26.554	20.581	25.438	32.108
Percentage in total industrial production volume, in percent	86,2	87,9	85,6	84,8	82,7	78,1	78,7	80,5
Average list of employees:								
Thousands	58,5	65,9	66,9	68,1	66,8	62,1	61,3	61,1

As can be seen from the table 11, this sector's place in total production volume was 78.7% in 2016. This situation is 80.5% in 2017. The number of energy sector employees was 61.3 thousand people in 2016 and 61.1 thousand people in 2017. In January-August 2017, oil production (including gas condensate) in Azerbaijan was 25 million 572.7 thousand tons, which was 9.3% less than in the same period of 2016. In January-August, the country produced 25 million 538,500 tons of commodity oil (down 9.3%).¹²⁰ Oil production including gas condensate is given below.

¹¹⁸ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

¹¹⁹ Ibid

¹²⁰ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

Table 12. Oil production (including gas condensate), thousand tons¹²¹

Years	Oil production (including gas condensate)
2004	15 549
2005	22 214
2006	32 268
2007	42 598
2008	44 514
2009	50 416
2010	50 838
2011	45.626
2012	43.375
2013	43.457
2014	42.076
2015	41.628
2016	41.050
2017	38.688

In the reporting period, 18,769.1 million. Cubic meters of gas (6.4% decrease) and commercial gas production volume was 12 billion 59.4 million cubic meters (4.1% decrease). In 2016, oil production including gas condensate in Azerbaijan was 41 million 29.5 thousand tons, gas production- 29 billion 331.3 million cubic meters. The volume of oil production in Azerbaijan in 2018 reached 38,758 million tons, following the predictions of 2017. In 2018, 38 million 758 thousand tons of oil was extracted in Azerbaijan, 38 million 706.1 thousand tons of oil was exported to the commodity. Oil and commodity oil production increased by zero compared to the 2017 figure. During this period in Azerbaijan, 30 billion 592.2 million. Square meter gas (7.1% increase) was produced. At the same time, commodity gas production was 19 billion 209.9 million cubic meters (5.8% increase).¹²²

Financial income rich in hydrocarbon resources in Azerbaijan largely depends on sales of oil, petroleum products and gas. From this prism, the change in oil prices in the world markets is an important indicator of the state's financial situation. It should be noted that when calculating the state budget and oil budget for 2017, the price of one barrel of oil is considered to be \$ 45. Under these conditions, it was stated that the State Oil Fund of the Republic of Azerbaijan (SOFAZ) had

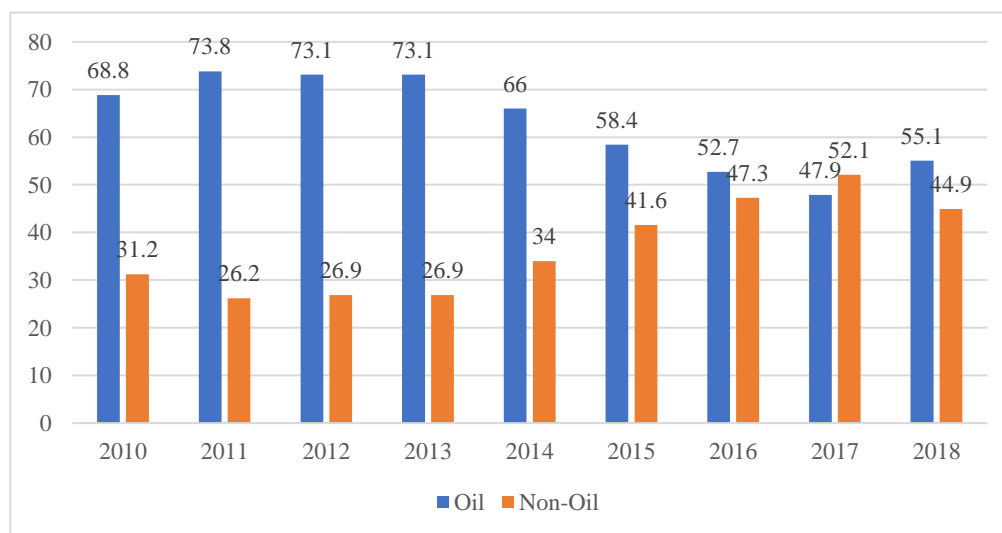
¹²¹ Ibid.

¹²² The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

a net profit of 9.724 billion manats from the sale of hydrocarbons from the Republic of Azerbaijan in 2018, and tax revenues from the oil sector to the state budget 1.88 billion manats. Thus, oil revenues in the state budget increased by 55.1% compared to the previous year.¹²³

We may find it difficult to say that the current global oil markets have changed in favor of Azerbaijan. The price of barrels of Brent crude oil ranges from \$ 40-55. Overall, the average price of Brent crude oil in January-March 2018 was \$ 66.8 per barrel. At the same time, the country's oil production increased by 2.4% to 9.7 million tons and gas production increased by 5.2% to 7.3 billion m3. According to the State Customs Committee, oil was exported in the first three months of the current year amounting to \$ 5,438 million or \$ 2,686 billion, \$ 938.9 thousand m3 or \$ 0.168 billion. Compared to the same period of last year, the volume of oil exported was 11.7% and the cost was 35%. (Azerbaijan Statistics Unit, 2018) It is stated that the total income from the oil sector in the state budget is 51% higher for 2018 than in 2017. The volume of transfers from SOFAZ to the state budget increased by 3.116 billion manats or \$ 1.83 billion. As a result, the share of the oil sector in the state budget increased by 7.2 points to 55.1%.¹²⁴ Figure 3 presents the Share of oil sector in state budget revenues.

Figure 3. Share of oil sector in state budget revenues, as a percentage¹²⁵



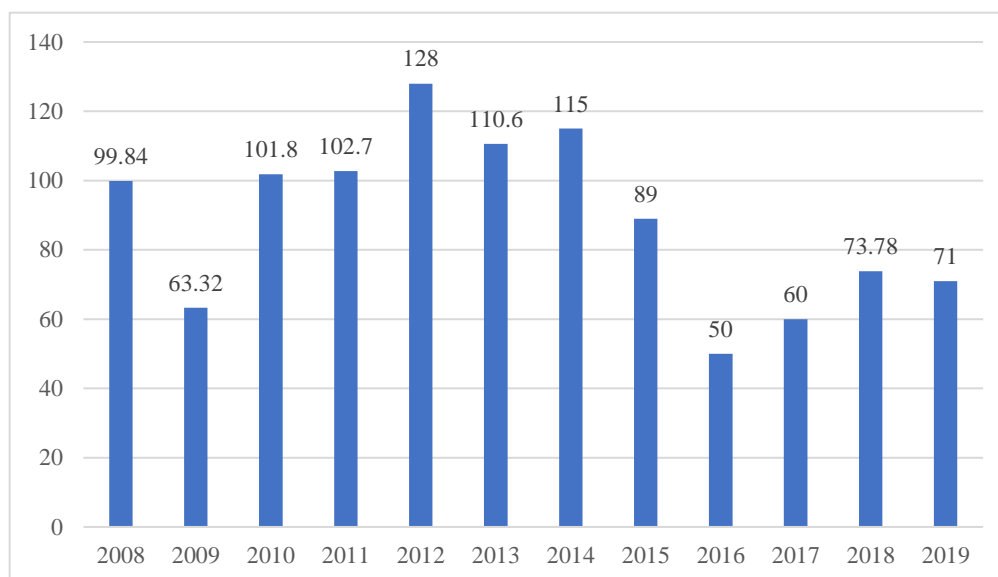
¹²³ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

¹²⁴ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

¹²⁵ Own elaboration from The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

The rapid increase in global demand for energy carriers led to the price of one barrel oil in 2010 reaching \$ 150 and \$ 225 in 2012. The highest price of Azerbaijani oil was recorded in December 2010 (\$ 96.52), the lowest price on May 25 (\$ 69). Overall, the average selling price of oil in 2010 was \$ 81.41. For comparison, the average oil sales price in 2009 was \$ 63.32 per barrel (28.5 percent less than in 2010), which was \$ 99.84 in 2008.¹²⁶ Azerbaijan oil price for 2018 was set at \$ 73.78. In the first three months of 2019, these figures decreased to \$ 71. The following figure recaps the oil price change between 2008 and 2019.

Figure 4. Azerbaijan Oil prices¹²⁷



As can be seen, the highest indicator of oil prices in Azerbaijan was experienced in 2012, the price of which increased up to 128 dollars. The lowest price was seen in 2016 with a price of 50 dollars. It should be noted that the factors affecting price fluctuations and price formation in the world oil market are world oil production and its demand dynamics. Changing these factors together or individually affects the world oil market and price formation in the world oil market. Some of these factors are beginning to show that the world has changed its impact on the oil market. This undermines the impact of such factors on price volatility in the world oil market.¹²⁸

¹²⁶ Ministry of Finance of the Republic of Azerbaijan, 2018

¹²⁷ Own elaboration from The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

¹²⁸ Suleymanov E., Zeynalov A., (2010) Net Export Function and Foreign Trade Multiplier of the Republic of Azerbaijan ", Azerbaijan, III International Conference on Caucasus and Central Asia in the Process of Globalization 15-17 October 2010 Qafqaz University, p.124

Up to now, 25 oil companies have signed 25 agreements with 30 foreign companies from 15 countries. The agreements signed with Western companies after the independence, the shares of the companies in the agreements, the estimated oil and natural gas reserves in the projects and the investment cost have been given in the table below. According to these agreements , investments in Azerbaijan's oil sector are around 50-60 billion dollars. Some of agreements are described in details in the table 13.

Table 13. Some of the Oil Agreements of Azerbaijan after 1994

N	Contract name	Year	Project partners	Investment,Billion USD
1	Azeri, Çıraq, Günesli	1994	SOCAR -% 10.00 BP - %34.13 Delta Hess - %2.72 Lukoyl - %10.00 TPAO - %6.75 Unocal - %10.28 Exxon - %8.00 Itochu - %3.9 Statoil - %8.56 Devon Energy - %5.62 Operator: AIOC	8
2	Karabakh	1995	LUKAcIP - % 45.00 Devon Energy - % 30.00 LUKOyl - %12.5 SOCAR - %7.5 Italya: AGIP - %5 Operator: CIPCO	1.7
3	Shahdeniz	1996	BP - %25.5 Statoil - %25.5 SOCAR - %10.00 TotalFinaElf-%10.00 Lukoyl - %10.00 OIEC - %10.00 TPAO - %9.00 Operator: BP Exploration LTD	4
4	Yalama	1997	SOCAR - %40 LUKOyl - %32.4 LukARCO - %27.6 Operator:LUKARCO Operating Campany	1

5	Araz, Alov, Sark	1998	SOCAR - %40.00 BP - %15.00 Statoil - %15.00 Exxon/Mobil - %15.00 TPAO - %10.00 Alberta Energy - %5.00 Operator: BP/Amoco	9
6	Kürdası-Kirgan-Arazdası	1998	SOCAR - %50.00 AGIP - %25.00 Mitsui - %15.00 TPAO - %5.00 Persol - %5.00 Operator: AGDP AzerbaijanBV	2.3
7	Zefer-Meshel	1999	SOCAR - %50.00 Exxon Mobil - %30 Conoco - %20.00 Operator: Exxon Mobil	2
8	Qaracuhur	2004	SOCAR - %25.00 Noble SKY - %75.00	0.25

CHAPTER III

PUBLIC FINANCE IN AZERBAIJAN: RELATIONSHIP BETWEEN STATE OIL FUND AND PUBLIC BUDGET

3.1 State Oil Fund of Azerbaijan (SOFAZ)

After Azerbaijan gained its independence, its rich oil reserves attracted the attention of developed countries and large international companies. In a short period of time, 22 international contracts (16 of them are offshore and 6 of them in dry areas) have been signed with foreign oil companies regarding the production of Azerbaijani oil. According to these, 60 billion dollars has been invested in the oil and natural gas industry of the country. The main purpose of the state was to gather these investments in a single center. It was one of the main tasks of the government at that time to ensure the development of non-oil sectors together with the oil sector in the country and to reduce poverty, to increase the role of oil revenues, to expand and implement the necessary work for the benefit of not a small group of oil revenues, but the entire population of the country and future generations. SOFAZ was established by the decision number 240 of the former President Heydar Aliyev on December 29, 1999. SOFAZ is a fund that provides collection, proper management and storage for future generations of the revenues obtained by the Republic of Azerbaijan due to the execution of agreements on oil and natural gas reserves. The main purpose of collecting oil revenues in the fund is to direct these revenues to the development of the primary sectors and projects that have socio-economic importance. SOFAZ is a specially designated State institution created as a legal entity with an independent management structure. The statute of SOFAZ was approved in 2000, and fund accumulations have been used since 2001. SOFAZ is committed to the realization of contracts signed between the leading oil companies of foreign countries with SOCAR for the exploration, processing and distribution of oil and natural gas in the territory of Azerbaijan, as well as the exploration and processing of oil and natural gas reserves in the Azerbaijan Republic and the Azerbaijani part of the Caspian Sea. It was created to manage the revenues to be obtained by the country with the realization of other contracts. Therefore;

1. SOFAZ is accountable to the President of the Republic of Azerbaijan and bears responsibility only to him.
2. SOFAZ is a public institution and legal person, has accounts in banks, the stamp of the State Coat of Arms of the Azerbaijan Republic and its name.

3. General control over the creation and spending of the SOFAZ is implemented by the State Supervisory Board of the Azerbaijan Republic.

4. SOFAZ does not have any responsibilities and duties vis-à-vis the Government of the Azerbaijan Republic, ministries, state committees, state organizations and financial institutions, including other state bodies, except for the rights and duties granted to the SOFAZ by the Decrees of the President of the Azerbaijan Republic.

5. SOFAZ is guided by the Constitution of the Azerbaijan Republic, the Decree and the orders of the President of the Azerbaijan Republic. The savings of the SOFAZ are managed by taking into account the supplements and changes determined in accordance with the decrees of the President of Azerbaijan. SOFAZ rules and regulations on the storage and management of currencies.

It is managed in accordance with the SOFAZ investment policy, which is determined every year by the decrees of the President of Azerbaijan. It aims to continuously increase the financial resources of the SOFAZ by managing the fund's savings in accordance with these rules and maintaining and protecting the investment funds. The institutions that can open SOFAZ foreign currency accounts are determined according to the institution's credit rating (Standard & Poor's AA- above, Moody's Aa3 and Fitch AA- above).¹²⁹ The investment portfolio of SOFAZ includes the following assets;

1. Deposits in central banks, commercial banks and other financial institutions;
2. Borrowing obligations of states, state institutions, international financial institutions, commercial organizations and other institutions with investment grade credit rating (Standard & Poor's, Fitch or Moody's);
3. Stocks in internationally recognized stock market indices;
4. Shares of equity funds as well as shares of alternative mutual funds;
5. Gold applied by the London Precious Metals Market Participants Association and meeting the demands;
6. Real estate;

¹²⁹ Sametzade, Z. (2013). State Oil Fund of the Republic of Azerbaijan, Grand Economic Encyclopedia, Baku: Letterpress, 134 p.

7. Securities that do not have an investment grade but are not lower than BB- (Standard & Poor's, Fitch) or Ba3 (Moody's) credit rating, if they do not exceed 5% of the total value of the investment portfolio.

The investment and risk management policies of the SOFAZ are based on the rules on the storage, placement and management of the SOFAZ currencies and the investment rules approved by the President of the Republic of Azerbaijan after being evaluated by the Observation Council every year. In accordance with the investment rules, SOFAZ fully accepts investment decisions. In the Long Strategy for the use of Petroleum and Natural Gas Revenues approved by the President of the Republic of Azerbaijan in 2004, the funds are designed to be actively used in the non-oil sectors of the economy, in the development of human capital, in strengthening the defense capability of the country and in similar directions.¹³⁰

Azerbaijan's oil revenues management system is based on the joint mechanism of the SOFAZ and the state budget. In other words, oil revenues are accumulated in the SOFAZ and used in various investment projects through the state budget. SOFAZ sources consist of the following:¹³¹

- 1) Funds and properties provided by the state.
- 2) Net share obtained from the hydrocarbons (combination of oil, natural gas, gas) and their sale in accordance with the share sharing agreements.
- 3) Bonuses paid by the investors to the State Oil Company of the Republic of Azerbaijan (SOCAR) or the competent state institution for the signing or execution of oil and natural gas agreements,
- 4) Land acquisition fees associated with the processing of hydrocarbon reserves.

¹³⁰ Yagubzade, M. (2012). The State Oil Fund Serves the Strategic Interests of the Republic of Azerbaijan. People's Newspaper, 4.

¹³¹ Sametzade, Z. (2013). State Oil Fund of the Republic of Azerbaijan, Grand Economic Encyclopedia, Baku: Letterpress, 134 p.

5) Revenues obtained from the Baku-Supsa, Baku-Tbilisi Ceyhan and Baku-Tbilisi-Erzurum export pipelines and oil and natural gas transportation from the territory of the Republic of Azerbaijan.

6) Income from assets invested by SOCAR or the competent state body within the framework of oil and gas agreements.

7) Real estate and savings obtained as a result of the activity of the SOFAZ, as well as the revenues obtained from the placement and management of the assets of the SOFAZ.

The expenditures financed by the ACDPF can be evaluated under five main headings as infrastructure expenditures, petroleum industry expenditures, non-petroleum expenditures, social assistance and transfers to the state budget. According to the data of 2001 approximately 105.0 million manats were spent for the improvement of social life conditions within the framework of social assistance in 2017, and approximately 14.0 million manats were spent for the education of Azerbaijani youth in foreign countries. Within the scope of infrastructure expenditures, 70.0 million manat was allocated for the construction of the Samur-Absheron irrigation system and 165.8 million manats for the development of non-oil industries. In the same year, 1.2 billion manats were spent for the petroleum industry, while the transfers to the state bank and the state budget were 13.6 billion manats.

3.2 State Budget of the Azerbaijan Republic and Its Preparation

The modern budget structure of the Republic of Azerbaijan was re-established with the independence of the country in 1991. The fact that the country was at war with Armenia at that time led to an increase in defense expenditures and as a result, it was observed that the budget structure was significantly deteriorated by the deficit until 1993. However, after 1993, the preparation of the State Budget and making estimates started to be accepted as an important tool of the economy and fiscal policy. The operating principles of the budget system of the Azerbaijan Republic are:¹³²

- The integrity of the budget system;
- Distribution of income and expenditures across budgetary system levels;

¹³² <http://cesd.az/new/?tag=azerbaijan-budget>

- Independence of various levels of budgets;
- Budget revenues and expenditures, state extra-budgetary funds are fully reflected in these budgets;
- Maintaining budget balance;
- Efficient and effective use of budget documents;
- The generality of the expenditures of budgets;
- To be clear;
- Budget indicators being real;
- The use of budget documents is suitable for certain purposes in advance;

All procedures regarding the preparation of the public budget in Azerbaijan are regulated by laws. These laws include the Constitution, the Law of the Republic of Azerbaijan on the Budget System, normative-legal regulations in accordance with this, as well as international agreements to which the Republic of Azerbaijan is a party. The first law on the Budget System was passed on December 1, 1992 and remained legally valid until 2002. The changing economic conditions and developing financial order every year also reveal the necessity of developing the law regarding the budget system. A special law on the State Budget was adopted on 18 May 1999. The terms of the State Budget in both laws are defined differently from each other. In the 1992 law, the Public Budget was defined as the creation and use of resources (or money) funds centralized in order for the state to realize its functions, whereas in the 2002 law this was defined as the state and local government institutions of the Republic of Azerbaijan to enable the state and municipalities to fulfill their functions and duties. It is defined as the most important fiscal bill for the collection and use of the required resources (or money).¹³³

In accordance with Article 11 of the Law on the State Budget of the Azerbaijan Republic, the budget preparation process begins 11 months before the fiscal year to which the budget belongs, but covers the period until the budget draft will be submitted to the parliament. This process begins in the last ten days of January, when the Council of Ministers officially shared it with the press. The State Statistics Committee and related institutions submit statistical information covering the last three years and the last period of the current year to the Ministry of Economy and the Ministry of Finance until the 5th of February. During March, the Ministry of Finance prepares

¹³³ Bulut, C. and Süleymanov, E. (2011). Public Finance, Kafkas University Publications no: 46, Baku.

a medium-term budget forecast (revenues, expenditures and financing of the budget deficit) for the next year in accordance with the medium-term economic and social development program, and the Ministry of Economy prepares an investment program. Until the 15th of April, the draft of the State Budget, the main directions of the budget tax policies, the upper limit of revenues and expenditures, government debt, priority expenditures, consolidated budget estimates for the next year and three years, and the first draft of the investment program by the Ministry of Economy.¹³⁴ Until May 1, the Ministry of Finance prepares a letter of instruction regarding the preparation of the state budget for the next year and the other three years and is sent to the relevant organizations in the preparation of the budget.¹³⁵ Until 1 July, the institutions and organizations that ensure the execution of the revenues of the State Budget, as well as the organizations financed from the budget, submit the budget project prepared in accordance with the instruction to the relevant institutions. By 1 August, the Ministry of Economy sends the finalized social, economic and investment programs of the next year and three years to the Ministry of Finance, taking into account the realized economic indicators of the current year. Later, the Ministry of Finance can also recalculate the Revenues and Expenditures of the State Budget and make necessary changes when necessary.¹³⁶

From this time on, budget negotiations begin in the Parliament. The State Budget law is accepted in three readings, no later than 20 December, and sent back to the President for approval. Thus, all necessary legal processes for the preparation of the budget are completed and the implementation of the budget is started. The State Budget of the Azerbaijan Republic is a legal document showing the revenues and expenditures needed by the state to realize its activities within the framework of general budget definitions and in which these are estimated. As a result of the analysis of the income and expenditure items of the State Budget, we can see in what direction the fiscal policy of the state has changed over the years and whether an effective policy is followed accordingly.

Since oil and natural gas revenues and exports make up a significant part of the Azerbaijani economy, we can analyze how the state uses this sector in fiscal policy in terms of revenues of the

¹³⁴ Valiyev, Z. (2006). State Budget, Baku.

¹³⁵ Ibid

¹³⁶ Bulut, C. and Süleymanov, E. (2011). Public Finance, Kafkas University Publications no: 46, Baku.

public budget by using the data included in the budget law of each year. Among the economic functions of the state, the redistribution of revenues and the production of public goods and services have a special place, and the realization of these functions is possible through budgets at different levels. The redistribution of revenues through the budget is a bilateral transaction that takes place at the same time and is mutually related. This process is as follows:¹³⁷

- Budget Revenues,
- Spending Budget Resources or Revenues,
- Budget Equivalence.

The budget is the most important financial act for the collection and use of the resources or money needed for the state institutions and organizations of the Republic of Azerbaijan, as well as the municipalities to fulfill their functions. Furthermore, the budget is considered the chief financial plan of the state. Thus, the budget has a bilateral account report, which are Revenues and Expenditures. In accordance with Article 9 of the Law on the Budget System, the Revenues of the State Budget are as follows:

- State Taxes;
- Grants;
- Other income.

According to its economic meaning, the revenues of the state budget consist of the following items:¹³⁸

- Current income, as well as state taxes predetermined in the tax law, interest and financial sanctions calculated according to these taxes,
- State dues, pictures paid once, customs dues,
- Income derived from the sale or lease of capital funds or goods in the state stock,
- Grants and transfers received from internal or external sources,
- Other incomes determined by law.

¹³⁷ Rasulov, F. (2006). State Budget Revenues, Baku.

¹³⁸ Valiyev, Z. (2006). State Budget, Baku.

Tax revenues occupy the most important place among budget revenues. Although it is possible to ensure stability in budget revenues thanks to taxes, it also varies according to the structure of developed and developing countries. While a significant portion of the budget revenues in more socially economically developed countries are taxes collected from real persons, in less developed countries indirect taxes and taxes collected from legal persons are constituted.¹³⁹

The classification of the revenues and expenditures of the state budget was prepared with the decision of the Council of Ministers No. 149 dated October 6, 2004 regarding the approval of the unit budget classification of the Azerbaijan Republic. According to this classification, budget revenues consist of 4 items: Tax Revenues (1.1), Social Allocations (1.2), Grants (1.3) and Other Incomes (1.4). Depending on these items, the classification has been decided such as section, subsection, item, and sub-item.

Tax revenues (1.1) is one of the most important tools used by fiscal policy to achieve its goals is public revenues. In other words, public expenditures should be made in order to fulfill public services, and these should be financed by public revenues.

Social Separations (1.2) are divided into social security and social needs depending on the social programs implemented by the state. Separations for social security were mandatory and required the creation of a special fund for collecting revenues.

Grants (1.3) are of particular importance for the state are the aids specified by law for the preparation and implementation of programs. International organizations, foreign governments, foreign legal entities and natural persons can be the persons making the grants.

Other Income (1.4) consists of income from wealth, income from the sale of goods and services, income from fines and sanctions, and voluntary payments.

Although public revenues in 2001 amounted to 79% of GDP, it reached the lowest level in 2006-2008 and was equal to 18%. Until 2015, budget revenues corresponded to an annual average of 30% of GDP. When the stable budget assumption is accepted when each of the budget's revenue items has an equal share in the total budget revenues, it is clearly seen what effect the transfers from the oil fund have. That is to say, 11.37% of the budget revenues each year between 2003-

¹³⁹ Bulut, C. and Süleymanov, E. (2011). Public Finance, Kafkas University Publications no: 46, Baku.

2008 was used in the account of transfers from the oil fund. Since 2009, the commitment rate has increased rapidly and until 2015, public revenues have been dependent on direct transfers from the oil fund at an average rate of 52.75% each year. As emphasized in section 2, where the revenues of the State Oil Fund are analyzed, since the budget revenues and expenditures of the Fund depend on oil prices, the state budget is affected by the Fund's spending policy, in other words, both the public budget and the Fund budget are It is seen that there is a positive correlation depending on and income. Thus, it is clearly seen at what level the stability level in public revenues is and that it actually carries risks.¹⁴⁰

Budget expenditures, in a narrow sense, are expenditures made by public institutions and organizations to fulfill their duties and functions. In fact, public expenditures, which are of great importance in measuring the size of the state in the economy, represent the sum of the costs related to the functions of the state or the functions of the state. The classification of budget expenditures is the classification of public expenditures according to different principles in accordance with the legal legislation.

Classification is made according to the name and structure of the units that can spend on the state organization. Economic classification is classification is divided into two as expenditures that use more resources and transfer income. Expenditures using resources and the state mechanism replace the market mechanism through the processes of political decision-making and public bureaucracy. Income-transferring expenditures are expenditures that transfer the purchasing power of the state from one group to another. These expenditures, which use resources and transfer income from an economic perspective, are classified as real and transfer expenditures. Real expenditures are expenditures made by using resources such as public consumption and public investments. These expenditures have a similar effect to private consumption and investment on production and price level. Transfer expenditures are those that transfer available resources from one segment to another. Transfer expenditures can also cause economic, financial and social effects. The purpose of providing public goods and services is not the only factor that drives the state to spend. Objectives such as increasing the growth rate, changing the income distribution, and improving the distribution of resources are the reasons that oblige the state to spend. Public

¹⁴⁰ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

expenditures are made to increase the total demand during the recession periods of the economy. Otherwise, total demand is tried to be reduced by decreasing public expenditures.

State Budget expenditures of the Republic of Azerbaijan increased 20 times in the period from 2001 to 2015 and increased from 1,006.6 million USD to 20,095.2 USD. Chart 38 gives the ratio of budget expenditures to GDP. The same trend is observed in budget expenditures as in budget revenues. Namely, the ratio of budget expenditures to GDP reached the highest level in 2001-2005, and decreased to the lowest level in 2006-2008. In 2009-2015, the ratio of budget expenditures to GDP was recorded as 32% every year.¹⁴¹ When we look at which items of expenditures have changed more, we can divide them into three groups. First group expenditures are those that have increased by up to 15% over the past 15 years (general public services; defense; education; health; social protection and social security; culture, arts, physical education and other; fuel and energy; agriculture and forestry, fisheries, hunting and environment; transport and communication). The second group of expenditures is those that increase by 20-25% and are also in line with the general increase rate of the budget. The third group of expenditures are those that have a very remarkable number compared to the rate of increase. Out of these expenditures, the judiciary, security and prosecution items increased 82 times and government investment expenditures increased 172 times.

3.3 Budget-Fiscal Policy and Effectiveness of Implementation in Azerbaijan

In the international community, three main methods of monetary policy implemented by the state are used in practice. These are:

1) Discount rate: (discount, refinancing¹⁴², etc.) The Central Bank provides loans to commercial and government banks and assigns a fixed interest rate on this loan. Generally, the government's monetary policy trends and the rate of return are determined by the Central Bank after each year's approval by the President. The importance of the accounting rate in the development of the national

¹⁴¹ The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>

¹⁴² A refinance, or "refi" for short, refers to the process of revising and replacing the terms of an existing credit agreement, usually as it relates to a loan or mortgage. When a business or an individual decides to refinance a credit obligation, they effectively seek to make favorable changes to their interest rate, payment schedule, and/or other terms outlined in their contract. If approved, the borrower gets a new contract that takes the place of the original agreement.

economy is that the government can implement different monetary policies. The discount rate directly influences the exchange rate of the national currency, as well as the interest rate on the most marketable credit by commercial and state banks.

2) Compulsory Reserve Ratio: The state influences banks' cash reserves by selecting mandatory reserve standards as a method of administrative impact. This method reduces the ability of banks to lend, which means they retain a certain percentage of cash held by state banks (12% of the authorized capital in Azerbaijan).

3) Open Market Transactions. The mechanism of this method is that the Central Bank deals with the purchase and sale of government securities and bank liabilities. The main feature of open market operations is that the government securities are bought and sold at a pre-determined rate rather than at a market rate. Interest rates are defined by the Central Bank in a differentiated way, depending on their duration. At the same time, the influence of the Central Bank on the money market and capital markets means that it will positively impact the growth of liquidity of government securities for credit institutions by changing its interest rate in the open market.

In addition to these 3 methods, the following three additional methods of monetary policy are used by the Central Bank in Azerbaijan:

1) Determination and regulation of the national currency exchange rate. The CBA continued currency auctions to arrange the sale of foreign currency provided by the State Oil Fund of Azerbaijan Republic (SOFAZ). Market participants were informed on auction parameters via the Bloomberg terminal prior to auctions. The Bank held 23 currency auctions in Q1 2021. Though increased in January, demand in the FX market has decreased and stabilized since February.

2) Granting centralized loans. The state provides loans with low interest, long-term or other preferential terms to carry out certain structural changes in the economy and develop certain areas. Credits are issued only to the head office of the given department, organization, enterprise, etc. Often such loans are issued in the form of mortgages.

3) Banking Supervision: Bank supervision is carried out in 2 forms: internal and external supervision. Internal control is exercised at any time by its founders or the board. For example: financial audits etc. External control can be exercised by the Central Bank not more than twice a year.

The basis of this scheme is the principle adopted by the central banks of developed countries. In the conditions of market economy, currency relations are carried out in the form of market and state regulation. Foreign exchange regulation of the market is carried out on the supply and demand market. One of the main functions of the Central Bank of the Republic of Azerbaijan is the implementation of monetary policy. In addition to the fiscal policy implemented by various financial authorities to ensure financial stability, central banks are pursuing monetary policy. The main goal of monetary policy is to ensure financial stability, sustainable employment and economic growth without causing inflation.¹⁴³

Central bank of Azerbaijan implements monetary policy in two ways: either using the regulatory function directly or indirectly by using the money-generating function. Central bank intervene directly with monetary policy instruments by setting limits on interest rates or deposits and loans, and targeting the balance sheets of financial institutions. The indirect monetary policy instruments seek to influence the level of supply and demand in the market and the main target is the balance of central bank.

The first foundation maneuver of the Central Bank of Azerbaijan was the transition to a floating exchange rate regime. Under the new regime, the manat exchange rate has changed under the influence of macroeconomic foundations (balance sheet, oil prices, etc.). In the foreign exchange market, there has been some rise and fall in the dynamics of the manat exchange rate, depending on the demand and supply ratio. The US dollar, which rose in January and February, began to fall more than in the second half of February. At the end of 2016, the exchange rate of the US dollar against the manat was 1.77 AZN, and by the end of 9 months the US dollar depreciated by 4% since the beginning of the year. Monetary policy instruments have been used to take into account inflation and money supply targets, as well as the transitional characteristics of monetary policy. Necessary adjustments were made to the interest rate corridor to reduce inflation and strengthen confidence in the national currency, as well as encourage the growth of manat deposits. In deciding on the interest rate corridor, the macroeconomic situation in the money market was taken into account.

¹⁴³ Mamedov ZF, Money, credit and banks. Textbook, Baku, 2010.

In the market economy, such government regulations are reflected in the foreign exchange policy. After independence from the USSR, Azerbaijan had to develop its own methods of regulation. However, spontaneous regulation during that period has led to deepening of the crisis in Azerbaijan, rising inflation and unemployment. Therefore, the main challenges facing macroeconomic policy in Azerbaijan are the reduction of inflation, the elimination of the budget deficit, the revision of the taxation system, the high level of employment, and the transfer of the National Bank to the central banks of developed countries. It plays an important role in regulating the economy of our country as a means of implementing monetary policy. As the main directions of the monetary policy are regulated by Article 28 of the Law of the Republic of Azerbaijan the Central Bank has to report to the President of the Republic of Azerbaijan and to the public the main directions of the state's monetary policy for the coming year by December 31. The macroeconomic situation of the Republic of Azerbaijan must be analysed in the main directions of the monetary policy and reflect the main directions of development of monetary policy and banking system. In the main directions of the monetary policy, the following is envisaged for the implementation of key tasks such as reducing inflation and strengthening the exchange rate of manat against foreign currency.

The other purpose of the central bank is to use the large money supply (M2). The Central Bank of Azerbaijan strives to influence prices by making use of the exchange rate or Nominal Effective Exchange Rate. The fact that the elements such as money supply and Nominal Effective Exchange Rate is integrated with the end-purpose of monetary policy and efficiency objectives of the monetary policy increases the activity as a secondary objective. In this context, defining the parameters such as monetary base and US dollar / manat exchange rate are among the efficiency objectives of the Central Bank of Azerbaijan. It strives to influence the money supply through the monetary base and the parameters such as the US dollar / manat exchange rate, the exchange rate or the nominal effective exchange rate. The definitions of money supply used in Azerbaijan are as follows:

M0: Money in circulation;

M1 = M0 + Demand Deposit;

M2 = M1 + Time Deposit; Time deposits can be 1 year, 6 months and 3 months.

M3 = M2 + Foreign exchange deposits.

Table 10. Money Supply (million manats)¹⁴⁴

Years	M0	M1	M2	M3
2006	1311,4	1839,6	2135,5	3435,0
2007	2713,5	3621,7	4401,6	5897,3
2008	4145,9	5105,2	6081,2	8494,5
2009	4175,0	5231,5	6169,4	8469,4
2010	5455,9	6838,5	8297,6	10527,6
2011	7158,4	8796,3	10997,4	13903,5
2012	9256,8	11122,3	13806,6	16775,5
2013	10458,7	12736,9	16434,8	19289,4
2014	10152,5	512830,4	17435,8	21566,4
2015	4775,9	6897,2	8678,3	21286,9
2016	6376,9	8960,3	11546,3	20889,6
2017	7490,3	10544,2	12466,4	22772,1
2018	7601,4	12274,6	14643,6	24060,4

In parallel to the fact that Manat is the only currency used in Azerbaijan, its demand has increased day by day. In addition, similar reasons such as an increase in inflation, a decrease in production and an increase in imports affected the parity between Manat and foreign currencies. At the beginning of 1994, 118 Manat corresponded to 1 USD and in December of the same year, 1 Dollar corresponded to 4500 Manat.¹⁴⁵ Between 2002-2007, the central bank approved a number of monetary policy decisions to support economic growth, to control inflation at an appropriate level, to protect the value of domestic currency, to further improve the banking sector, and to facilitate the competitiveness of the non-oil sector. The Central Bank analysed to achieve these objectives by utilizing monetary policy instruments such as political interest rate, reserve requirement ratios, open market transactions and intervening in exchange rates. Between 2008 and 2009, many countries' economies were affected by the financial crisis, which crumbled the financial sector, led to significant reductions in the amount of economic transactions and increased unemployment. The financial crisis that emerged in mid-2007 with the US high-risk home loans crisis gradually affected all developed countries. Particularly in the first half of 2009, when the crisis began to be felt deeply, negative reflections in housing loans markets in the developed

¹⁴⁴ CBAR, Statistical Bulletin, (12/2018), p.14.

¹⁴⁵ Aras, Azerbaijan Economy: Macroeconomic and Sectoral Analysis, 2003, pp. 157-158

countries, increases in the amount of unpaid loans of banks, decreases in consumption expenditures and investments and increases in unemployment rates occurred. In most of the developed countries, there was a significant decline in GDP at the beginning of the year, which led to a significant easing of monetary policy in some countries, and increased government spending and budget deficits. At the same time, audits on the financial system have increased. In 2008, the central bank implemented its monetary policy under the influence of the international economic situation. They have arranged the monetary policy of the central bank to assist in the defense of the macroeconomic balance and to achieve the balance in the financial field.¹⁴⁶ In 2009, the monetary policy of the Central Bank was realized despite the protection of macroeconomic and financial stability by maintaining the stability against the crisis, ensuring stability in the activities of the banks and enterprises that are important for the system and eliminating the need for money in the economy.¹⁴⁷ On 21 February 2015, the Central Bank decided to devalue. After the devaluation decision of Azerbaijan, manat decreased by 33.8% against the Euro and 33.9% against the dollar. The central bank explained the reason for the devaluation in the form of diversification of the national economy, increasing global competitiveness and export capacity, and strengthening the international payment potential of the country.¹⁴⁸

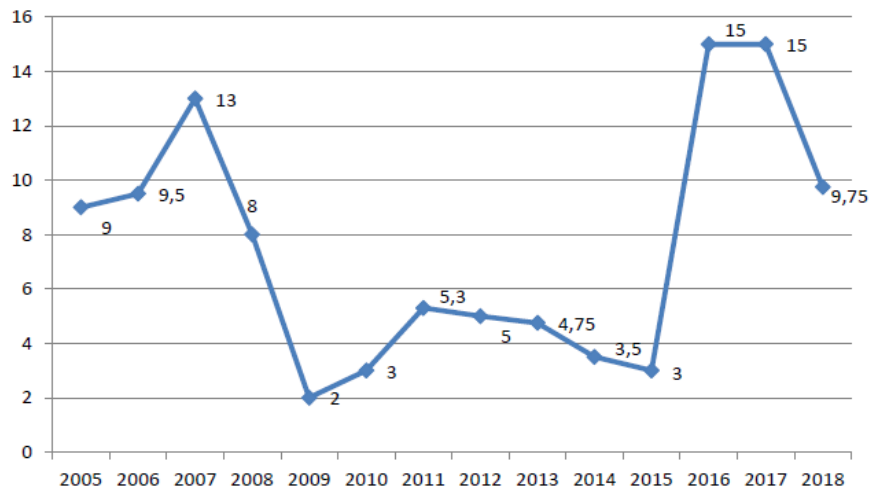
The central bank of Azerbaijan utilizes monetary policy instruments such as rediscount rate, reserve requirement ratio, open market transactions, interest rate corridor and political interest in order to have an impact on the aims it makes. The central bank gives loans to banks in order to finance commercial banks such as the last lender and to provide money. Credit activities are allocated to commercial banks by auction method only in line with the application of certain money. The Central Bank cannot directly determine interest rates. However, the Central Bank can control interest rates by changing the interest rates applied to loans extended to commercial banks.

¹⁴⁶ Ibid, 2008, p. 30

¹⁴⁷ Ibid, Annual Report 2009, 2009, pp. 1-2

¹⁴⁸ Sputniknews, 2015

Figure 10. Discount Rates¹⁴⁹ % (2005-2018)¹⁵⁰



As a result of the monetary policy carried out by the central bank, interest rates of Discount credits¹⁵¹ have continuously decreased. At the end of 1995, interest rates were at 80%, down to 9% in 2005 and to 2% in 2009. This rate increased from 3% to 15% in 2016. The central bank can implement monetary policy by setting up the credit facilities of banks through provisions. Required reserves do not only affect manat but also the amount of currency in circulation. In Azerbaijan, required reserves were applied equally to manat and foreign currencies during the research process. In 1999, the required reserve ratios for Manat and foreign exchange were reduced from 12% to 10% and in 2009 from 6% to 0.5% in order to increase the cash of banks. Subsequently, although it increased to 3% in 2014, it has decreased to 0.5% since 2016. In order to improve the capital market, the Central Bank was allowed to use the instruments which they kept in reserve resources to the banks for the purpose of obtaining up to 50% of the securities. In this context, the central bank decreased the required reserve ratios in order to increase the liquidity of the banks. However, frequent changes in the reserve ratio make liquidity more difficult as it may create uncertainty in

¹⁴⁹ Discount rate, also called rediscount rate, or bank rate, interest rate charged by a central bank for loans of reserve funds to commercial banks and other financial intermediaries. This charge originally was an actual discount (an interest charge held out from the amount loaned), but the rate is now a true interest charge, even though the term discount rate is still used.

¹⁵⁰ CBAR, Statistical Bulletin (12/2018), p.41.

¹⁵¹ Rediscount credits are extended to firms through intermediary banks in Azerbaijani manat equivalent of the foreign currency amount specified in the bill, which is calculated over the exchange rate effective on the day that the credit is extended.

the banking system. The role of open market transactions in the organization of the capital market is also gaining importance. The activities in the capital market serve as a means of providing instruments to the state budget in one aspect and, in one way, as the intermediary for the regulation of the money market for the central bank. The central bank influences the purchase and sale of government bonds from the market and the volume and expansion of money in circulation, the reserves and credit conditions of banks. Starting from 2001, the Central Bank implemented the repo and reverse repo activities. Although the central bank carries out repo transactions, it buys securities from banks and increases the money supply in circulation with this, whereas the reverse repo sells its own securities to banks on the contrary and reduces the money supply as a result of this transaction.

The Central Bank of Azerbaijan has implemented the interest rate corridor policy since the first quarter of 2007. With this turn, it was accepted that the change would not be directly regulated by the money market but that the change would be driven by interest rates under free market conditions. The ultimate goal of the implementation of this mechanism is to ensure the institutional strengthening of the potential of monetary policy in the future without narrowing the effect of interest rates in international markets within the interest rates defined by the central bank of Azerbaijan. The Central Bank of Azerbaijan considers daily repo interest rates as borrowing interest rates, daily reverse repo interest rates as lending interest rates and rediscount interest rates as political interest rates. In this system, the central bank of Azerbaijan changes borrowing, lending and political interest rate levels in certain periods. In this context, the central bank made changes in the upper band and lower band of the interest rate corridor in line with the needs of the economy. Banks can borrow from the central bank only if there is a significant cash shortage. In this case, the central bank's reduction in lending interest rates is not effective in market interest rates and market interest rates are still at very high levels.

SWOT (Strength, Weakness, Opportunities and Threats) analysis identifies the strengths and weaknesses of the variable under study and expresses the situation in which they try to identify the reflections of opportunities and threats posed by external factors in terms of the variable. The purpose of this SWOT analysis, widely used today, is to focus on areas where strengths and opportunities lie, taking into account internal and external factors, and to develop strategies and strategies that minimize the impact of threats and weaknesses. The word SWOT is composed of

the initials of the words strengths, weaknesses, opportunities and threats. While strengths and weaknesses stem from internal factors, opportunities and threats stem from external factors. In today's conditions of global competition and financial crisis, the SWOT analysis strategy is important for the Central Bank of Azerbaijan to develop and stabilize the financial market, to conduct a conscious and systematic analysis to determine various policies and strategies, to make the best use of its own funds and tools, and to develop new strategies. First of all let's have a look at strengths. Central Bank is independent from the government, full authority in maintaining price stability and implementing monetary policy. The Central Bank's disclosure of its medium and long-term policies to the public is responsible for its announced targets, and explains its policies to the parliament and the public. Central Bank is free to determine interest rate and can implement floating exchange rate regime. The Central Bank is responsible for developing financial markets, controlling the financial system, maintaining the payments and clearing system safely. The Central Bank manages the liquidity of banks and the amount of money in the market with open market operations and this policy is free and flexible. Weaknesses are the following: Lack of trust in the domestic currency due to the expectation of fluctuations in the exchange rate; The quality deterioration in the balance sheets of banks 'governors, the high share of inefficient funds in banks' portfolios; Low equity capital of banks and financial institutions; High rate of banks whose financial structures are unhealthy; The progressive reforms implemented in financial liberalization remain at a low pace; The lack of deepening of the finance and banking sector, the underdevelopment of the securities market; Private banks extend more loans to companies in their groups; Inadequacy of Banks' Accounting, Reporting Financial Information and Legal Infrastructure.

Now let's have a look at external factors which are opportunities and threats. Opportunities are the following: The share of the public-private sector in the economy is gradually changing in analysis of the private sector; Large volume of foreign capital inflows, although predominantly for the oil sector; The adoption of a long-term strategy for oil and gas revenues management; Increasing overall country score in the reports of various international institutions on the insurrectional environment and economic freedoms; The competitiveness of the country's economy is above the world average; Rapid increase of the country's share in world trade; High level of education; A macroeconomically stable environment; The ratio of external debt to GDP is not high; The existence of an overall macroeconomically stable environment, including general

price stability; Existence of government incentive policies; Development potential of the finance sector; The existence of political stability; High level of integration with the world economy; Being ahead of the countries in the region in transition to the free market.

Threats however are the following: Investments are generally directed towards crude oil production and not focused on production again in the oil sector; The lack of industrial bourgeoisie since the industry is based on oil and the oil sector is not privatized; Since the majority of oil revenues are collected in the Oil Fund, the decision of the state, not the market, on how to use the oil revenues; The migration of educated and qualified workforce abroad, labor shortage in the regions; Despite the low share of the public in the economy, the state assumes a decisive and imperative role in the decisions of economic units. Economic and foreign trade freedoms are at a low level; Corruption and bribery rate; Dependence of exports and state budget on oil revenues; Fluctuations in the oil price; Low level of income and unbalanced income distribution; Lack of attention from other sectors due to an economic structure dependent on oil and natural gas production; Monopoly and unfair competition environment.

It directly determines the monetary policy pursued by the Central Bank in order to ensure financial stability and the monetary policy instruments used. He can support the government's growth and employment policies, provided it does not conflict with his own policies. In fulfilling this responsibility, the central bank is responsible for open market operations, taking the necessary steps to protect the value of a country's currency, conducting the necessary studies of the exchange rate regime, defining procedures and principles regarding reserve requirements and general inconsistencies, rediscounting and advance transactions, and money. To ensure the stability of the financial system. And uses tools such as foreign exchange regulation and financial market monitoring

In this section, the monetary policy implemented by the Central Bank of Azerbaijan to ensure financial stability will be analysed using the SWOT methodology, which has the aforementioned importance and necessity. As a method of analysis, the strengths and weaknesses of the central bank's monetary policy will be examined, while threats and opportunities are mainly external factors that influence this policy. Here, based on the assessments in the study, a matrix was created within the framework of the SWOT analysis of monetary policy conducted by the Central Bank of Azerbaijan to ensure financial stability. The SWOT Matrix can shed light on

aspirations and initiatives on how to take advantage of advantages, how to eliminate weaknesses, how to seize opportunities and eliminate threats. The estimates in the following matrix are based on information and estimates in reports from international and national organizations related to Azerbaijan.

Meanwhile, World Economic Forum (WEF), European Bank for Reconstruction and Development (EBRD) Transition Indicators, The Wall Street Journal and Heritage, Fitch Ratings Banking System Risk Report, and International Monetary Fund (IMF) Research Review, Country Azerbaijan's report (European Neighborhood Policy), laws and amendments concerning the Central Bank of Azerbaijan, annual reports published by the Central Bank of Azerbaijan, annual reports and laws on the budget of the Ministry of Finance of Azerbaijan. The matrix shows the strengths and weaknesses, opportunities and threats of the work of the Central Bank of Azerbaijan in ensuring financial stability, domestic money supply, adjusting the money market, managing the country's gold and foreign exchange reserves, regulating foreign payments and regulating the activities of the state cashier or acting as a financial agent. Shows. As one of the strengths of the variable, the Central Bank develops financial markets, controls the financial system, takes on the task of maintaining the payment and clearing system in a secure manner, the Central Bank manages banks' liquidity and the amount of money in the market through open market transactions, and this policy is free and flexible, the Republic of Azerbaijan on June 10, 1996, amendments and additions were made to the new edition of the Law on the National Bank and the corresponding law of 1997, 1998, 2001, 2002 and 2004. One of the strengths of the variable – high foreign exchange reserves – can be seen in the numbers following the 2008 Annual Report published by the Central Bank. One of the weaknesses of the variable, the large volume of loans in the volume of loans, can be seen in reports issued by the Central Bank of Azerbaijan in the second half of 2009. Compared to the previous year, in 2009 the volume of loans issued in foreign currency increased by 61.9%, and the amount of loans in manats – by 41.4%. As a result, the ratio of loans issued in manats to the total loan amount was 50.1%, and the ratio of loans issued in foreign currency to the total loan amount was 49.9%. 42.4% of short-term loans and 53.4% of long-term loans were loans in foreign currency. As a result of threats from external factors, exports and the state budget depend on oil revenues, as can be seen in the reports of the Central Bank opened in different years. The share of oil and oil products in exports was 64.8% in 1998, 75.9% in 1999, 84% in 2000, 91.23% in 2001, 81.23% in 2002 and 82% in 2004.

It directly determines the monetary policy pursued by the Central Bank in order to ensure financial stability and the monetary policy instruments used. He can support the government's growth and employment policies, provided it does not conflict with his own policies. In fulfilling this responsibility, the central bank is responsible for open market operations, taking the necessary steps to protect the value of a country's currency, conducting the necessary studies of the exchange rate regime, defining procedures and principles regarding reserve requirements and general inconsistencies, rediscounting and advance transactions, and money. To ensure the stability of the financial system. And uses tools such as foreign exchange regulation and financial market monitoring.

CONCLUSION

The purpose of this thesis was to examine the fiscal and monetary policy followed by Azerbaijan, which is a resource rich country, and to investigate the effectiveness of the policies implemented in line with the objectives. After examining the path of the Azerbaijani economy from independence to the present, how the fiscal policy is applied in the context of the country's economic development and growth, stability and efficiency has been investigated. Especially in the last ten years with the rapid increase in energy prices, the questions about how efficiently Azerbaijan has used these revenues, which has gained a large oil income, are still up-to-date. The stable path followed by the country, which mainly links the public budget to oil and natural gas revenues and provides economic growth rather than economic development, can be clearly seen in the economic conditions of recent periods. Therefore, there is a situation that can be characterized as a decrease in budget revenues due to oil prices, making public expenditures suitable for this income or loss of social welfare. Although Azerbaijan made large investments during the times of the highest oil revenues, it lagged in the diversification of the economy.

The decrease in oil prices below 50 USD / barrel in 2015 caused the Central Bank of the Republic of Azerbaijan to devalue twice and switch to the guided fluctuation exchange rate regime. The country's current account and public budget had a deficit. Financial stability has deteriorated, financial instability has increased, and a tight monetary policy has been implemented to prevent inflation and support the domestic currency.

A Control Room has been established in the Financial Markets of the Republic of Azerbaijan in order to restructure and supervise the financial sector. GDP produced in the energy sector between 2006-2014 constituted 75% of the total GDP produced in the country. The share of the energy sector in the total exports of the country was 90%. After the decrease in oil revenue in 2016 2019 and the realization of the Shahdeniz 2 project, natural gas revenue increased starting from 2018. Public revenues have also declined as a result of the rapid decline in oil prices. The government aims to increase the share of non-oil tax revenues in budget revenues in order to stabilize public revenues in the following periods. For this, it aims to simplify the tax system by encouraging non-oil economic activity in the country. A new investment certificate project started to be implemented in March 2016. The amount of investment requested for investors has been determined from a minimum of 200 thousand AZN to a maximum of 10 million AZN (or more).

Investors holding this certificate will be exempt from income tax up to 50% for seven years. However, it is not clear to what extent these steps will increase productivity in tax revenues in the long run. Transfers from the State Oil Fund to the public budget have constituted an average of 50% of the budget revenues in recent years, which can be considered as a risky situation or a reason that will cause instability in the provision of revenues. However, the State Oil Fund, the most important and strategic institution of the country, applies a policy decided by the government every year, instead of the expenditure policy regulated by law. Therefore, the fact that the budget of the Fund, which is a national capital, is under the control of the government instead of the National Assembly may cause transparency, efficiency and other important issues to be ignored. It can be said that oil revenues are actually under the control of the government through transfer to the budget. The ratio of debt to GDP of Azerbaijan, where 70% of the state debt is constituted by foreign debts, increased from 11% to GDP in 2014 and increased to 38% in 2016. In addition, 2015-2016 has been a very difficult period for the Azerbaijani economy. In order to contain inflationary pressures, the Central Bank tried to reduce the excess liquidity in the banking and finance sector by changing the interest rates three times in February, March and August 2016 and by making deposit auctions. In addition, credit increases in the economy took a negative trend. Considering all these, we can say that Azerbaijan should adopt a new budget application without oil or natural gas income as soon as possible, it will be a more effective decision in the medium and long term. The introduction of the Fiscal Rule implementation (limiting the level of public expenditures, taxes, budget balance and borrowing) and limiting the transfers from the Petroleum Fund to the state budget with legal regulations will prevent any waste in public expenditures. When the public budget is prepared, gradual cessation of the transfer of oil revenues to the budget will be effective in ensuring financial stability in the long term.

REFERENCE LIST

- Abbasov, C., (1998). Economic and Social Geography of the Azerbaijan Republic. Baku State University Publications, Baku, p.78
- Aksoy, Ş. (1998). Public Finance, Istanbul, Filiz bookstore., p.78
- Allahverdiyev N., (1991). Economic and Social Geography of Azerbaijan Respublika, Publication of Education, Baku, p.58
- Aras, O. N. (2003). Economics of Azerbaijan. Baku: Eastern-Western printing house.
- Arezki, R. (2012). The Natural Resource Curse: A Survey of Diagnoses and Some Prescriptions in Commodity Price Volatility and Inclusive Growth in Low-Income Countries. 3
- Aslanli, K. (2013). Evaluation of Economy and Diversification of Exports, Law Press, Baku, p.62. Strategic Road Map, (Online), <http://www.static.prezident.az/pdf/38542>
- Bagirov BA, Oil and gas mining geology, ASOIU, 2011
- Bal, H. (2015). Economic Development and Natural Resources: A Study in Transition Economies, Chukurova University, S.B.E., <http://sbeski.cu.edu.tr/dergi.asp?dosya=772>, p.90
- Bhagwati, J. N. (1987). Immiserizing growth, in The New Palgrave: A Dictionary of Economics, (J. Eatwell, M. Milgate and P. Newman, eds.), London: Macmillan
- British Petroleum [BP] (2008), Statistical review of world energy, p. 6.
- Broz, T. (2011). The Dutch Disease in Unwonted Places-why has Croatia Been infected while Slovenia Remains in good health? South Eastern Europe Journal of Economics. Pp. 47-66.
- Bulut, C. and Süleymanov, E. (2011). Public Finance, Kafkas University Publications no: 46, Baku.
- Cardenas, M. (1994). Stabilization and redistribution of coffee revenues: A political economy model of commodity marketing board. Journal of Development Economics, 44 (2), pp.355.
- CBAR, Statistical Bulletin, (12/2018), p.14.
- Cenk, P. (2007). New Dimensions of Energy from the Perspective of Turkey-US Relations: A Screenplay Essay on the Future of Iraq, Eurasian File
- Chigrin, A.D (2010). It is unprofitable to produce: the consequences of the Dutch disease, p.3
- Corden, W.M. (1984) Booming Sector and Dutch Disease Economics Survey and Consolidation. Oxford Economic Papers, New Series. 36(3), pp. 359-380.

- Deniz, V. (2007). *Technical Principles in Supply of Pipelines and Security in Supply*, Ankara: Konrad Adenauer Foundation Publication, p. 126.
- Desai, P. (2006). Why is the Russian GDP growth slowing?. *The American Economic Review*, 96 (2), p. 347.
- Ehmedov, M. (2003). *Oil and Future of Azerbaijan. Political Aspects of Azerbaijan Oil*. Baku. Baki Publishing House.: 150
- Ehmedov, M. (2015). *Marketing of Service Sector*, University of Economics Printing House, Baku, p.6
- Ekrem, N. H. (2006). The Effects of Baku-Tbilisi-Ceyhan to China, *Strategy*, 3(114), p. 21.
- Eminov, Z. (2002). *Physical and Economic Geography of Azerbaijan*. Azerbaijan Science Academy Geography Institute Publication, Baku, p.45
- Fetisov, G. G. (2008). Tasks of reducing the dependence of the Russian economy on commodity exports and economic policy alternatives , *Problems of Forecasting*. N 3.
- Garcia, J.G. (1991). Agricultural prices and wages in Colombia: Impact of the coffee boom and government expenditures. *Food Policy*, 16 (1), pp. 23 – 25.
- Gilmundinov, V.M. (2008). The Dutch disease in the Russian economy: sectoral aspects of manifestation, *IVF*. 12, p. 18
- Grigoryev L.M., Salikhov, M.R. (2007). *GUAM - Fifteen Years Later: Shifts in the Economy of Azerbaijan, Georgia, Moldova and Ukraine, 1991–2006*. Regnum,.
- Gürhan, S. and Mehmet, S. (2008). *Experts Explained: The Cause of the BTC Explosion Technical Failure*, Zaman newspaper
- Halland, H., Nair, A. A., and Lokanc, M. (2015). *The Extractive Industries Sector*, World Bank Study, Washington, DC USA
- Hemming, Richard. (2013). *The Macroeconomic Framework for Managing Public Finances*. 10.1057/9781137315304_2.
- Hilaire, N. (2009). *Dutch Disease, Oil and Developing Countries* , December 2004 Lartey E. *Capital Inflows, Dutch Disease Effects and Monetary Policy in a Small Open Economy*. – Boston
- Ho, P. (2008). Arguing for Policy Space to Promote Development: Prebisch, Myrdal, and Singer. *Journal of Economic Issues*, 42(2), 509-516. Retrieved April 14, 2021, from <http://www.jstor.org/stable/25511336>

- IMF: Regional Economic Outlook: Middle East and Central Asia, <http://data.imf.org/?sk=4CC54C86-F659-4B16-ABF5-FAB77D52D2E6&sId=1421768699479>
- Information on Use of Funds, (Online), <http://edf.gov.az/az/content/24>
- International Energy Agency [IEA] (2003), World energy investment outlook, p.144.
- Ismail, A. (2008). Security weaknesses in the project of the century will cost high to Turkey, Zaman newspaper
- Ismailov, F.S., Hacıyev, F.M., Mehdiyev, U.S. and Salmanov, A.M. (2013). Hydromineral resources of oil and gas condensate deposits in Absheron peninsula. Baku, NQETLI
- Kamas, L. (1986). Dutch disease economics and the Colombian export boom. World Development, 14 (9), p.60.
- Karimov, P. D. R. (2015). Development of Non-Oil Sector in Azerbaijan: Tendencies and Opportunities //Journal of Business & Economic Policy. 2(2), pp. 39-52.
- Kenan, C. and Cemalettin, K. (1999). Azeri Oil Past and Present”, Eurasian Studies, p.117.
- Koçman, Asaf, Aydın Ibrahimov (1994). Geography of Azerbaijan. Izmir: Ege University Faculty of Letters Publications.
- Kraay, Aart; Serven, Luis. 2013. Fiscal Policy as a Tool for Stabilization in Developing Countries. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/16362> License: CC BY 3.0 IGO
- Kuliev, R.A. (2007). Transitional economy of Azerbaijan: some aspects of development
- Latsis, O. (2005). Dutch Disease hits Russia. The Moscow News, <http://eng.globalaffairs.ru/engsmi/922.html>
- Lederman, D. (2008). In Search of the Missing Resource Curse. *Economia Fall*, pp.1-58.
- Magud, N. (2010). When and Why Worry About Real Exchange Rate Appreciation? The Missing Link between Dutch Disease and Growth. IMF Working Paper, WP/10/271, pp.1-33.
- Mamedov ZF, Money, credit and banks. Textbook, Baku, 2010
- Manzano, Osmel & Rigobon, Roberto. (2001). Resource Curse or Debt Overhang?. National Bureau of Economic Research, Inc, NBER Working Papers.
- Matsen, E. (2005). Optimal Dutch Disease. *Journal of the Development Economics*.78(2), pp. 494-515.

- Merlevede, B. (2009). Russia from bust to boom and back: Oil price, Dutch Disease and stabilisation. *Comparative Economic Studies*, 51, p. 214 – 232.
- Montes, M.F., and Popov, V.V. (1999). Asian virus or Dutch disease? Theory and history of currency crises in Russia and other countries
- Mustafa. H. (2007). Eastern Mediterranean Energy Center, Strategy, March 26, 3(143), p.15.
- Nurkse, R. (1961). International trade theory and development policy. In *Economic Development for Latin America* (pp. 234-274). Palgrave Macmillan, London.
- Oomes, N. (2007). Middle East and Central Asia Department Diagnosing Dutch Disease: Does Russia Have the Symptom? *International Monetary Fund Publications* pp. 1-34.
- Oomes, N., and Kalcheva, K. (2007). Diagnosing Dutch Disease: Does Russia have symptoms?. *IMF Working Paper, WP/07/102*: pp. 1-32, p. 8-19
- Ossowski, R., and Halland, H. (2019). Key Aspects of Fiscal Management in Resource-Rich Countries. 10
- Otero, J.G. (2001). Coffee export booms and monetary disequilibrium: some evidence for Colombia. *Applied Economics*, 33 (2), p. 273.
- Petroleum Revenues of Azerbaijan, Baku, Ministry of Finance Publications, 2017
- R. Ibrahimov (2013). Energy and Azerbaijan: History, Strategy and Cooperation
- Rahimzade, N. (2011). Azerbaijan's oil and gas strategy continues successfully, *Iki Sahil*, 5.
- Rasulov, F. (2006). State Budget Revenues, Baku.
- Rosenberg, C. B., and Saavalainen, T. O. (1998). How to Deal with Azerbaijan's and Oil Boom? Policy Strategies in a Resource-Rich Transition Economy, *IMF Working Paper*
- Sachs, S. (2001). Natural Resource and Economic Development. *European Economic Review*, 45, pp. 827-838
- Sametzade, Z. (2013). State Oil Fund of the Republic of Azerbaijan, *Grand Economic Encyclopedia*, Baku: Letterpress
- Scherr, S. J. (1989). Agriculture in an export boom economy: A comparative analysis of policy and performance in Indonesia, Mexico and Nigeria, *World Development*, 17 (4), pp.548-549.
- Schinasi, G. (2006). *Safeguarding Financial Stability: Theory and Practice*. New York: IMF Publications.

- Shakaliyev, A., and Shakaliyev, Q. (2016). *Economics of Azerbaijan: Realities and Perspectives*. Baku: Turhan Publishing House.
- Sharma, N., and Strauss, T. (2013). *Special Fiscal Institutions for Resource-rich Developing Economies*, Overseas Development Institute London, UK
- Shen, E. (2005). *Republic of Azerbaijan Country Profile*, T.C. Prime Ministry Undersecretariat of Foreign Trade, Export Development Research Center
- Shultz, J. (2004). *Follow The Money – A Guide To Monitoring Budgets and Oil and Gas Revenues*, Open Society Institute, New York, p.7
- State Program for the Development of Industry in the Republic of Azerbaijan 2015-2020, (Online), <http://www.e-qanun.az/framework/28964>,
- Suleymanov E., Zeynalov A., (2010) Net Export Function and Foreign Trade Multiplier of the Republic of Azerbaijan ", Azerbaijan, III International Conference on Caucasus and Central Asia in the Process of Globalization 15-17 October 2010 Qafqaz University, p.124
- The Central Bank of Azerbaijan Republic, *Azerbaijan Monetary Policy Report 2011*, pp. 38-41
- The State Statistical Committee of Azerbaijan Republic, <https://www.stat.gov.az/>
- Usui, N. (1997). Dutch disease and policy adjustments to the oil boom: A comparative study of Indonesia and Mexico. *Resources Policy*, 23 (4), pp. 151 – 162.
- Valiyev, Z. (2006). *State Budget*, Baku.
- van der Ploeg, Frederick (Rick) and Poelhekke, Steven, (2010), *The pungent smell of "red herrings": Subsoil assets, rents, volatility and the resource curse*, *Journal of Environmental Economics and Management*, 60, issue 1
- Veliyev, C. (2008). *War Without a Winner*, *Strategy*, 5(231), 2008, p. 9. <http://www.socar.az/socar/en/activities/transportation/baku-tbilisi-ceyhan-btc-main-export-oil-pipeline>
- Vostroknutova E. (2010). *Dealing with Dutch Disease*, *Economic Premise*, 16, pp. 1-7.
- World Bank (2008), *The World Bank in Russia: Russian economic report*, p. 5
- World Bank, (2002), *Treasure or Trouble? Mining in Developing Countries*. Pp. 1-22
- Yagubzade, M. (2012). *The State Oil Fund Serves the Strategic Interests of the Republic of Azerbaijan*. *People's Newspaper*, 4.

- Yardımcıođlu, F. (2013). Dutch Disease in OPEC Countries: An Econometric Analysis of Oil Prices and Economic Growth. *Journal of Socio-Economics*, 19 (19). Pp.1-24
- Yigit, M. (2001) Dutch Disease. *Dumlupınar University Journal of Social Sciences*, 5,p.3
<https://www.economist.com/the-economist-explains/2014/11/05/what-dutch-disease-is-and-why-its-bad>
- Yuruk., M. (2008). The Curse of Resources: The Case of Russia. *Trakya University Institute of Social Sciences*, Published Master Thesis, Edirne. p-32