

**REPUBLIC OF AZERBAIJAN**

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**ABSTRACT**

On the rights of the manuscript of the dissertation  
for the degree of Doctor of Science

**PROBLEMS OF FORMATION AND EFFICIENT USE  
OF INVESTMENT RESOURCES IN THE ECONOMY  
OF AZERBAIJAN**

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## GENERAL CHARACTERISTICS OF THE WORK

**Relevance and study level of the topic.** Increasing the level of employment and per capita income, creating and implementing innovations, increasing production efficiency, and solving such problems in the national economy depends on investments. The volume and direction of investments influence the economic structure, determining the rate of economic growth. Thus, investments, being one of the main factors of socio-economic changes, reflect the accumulation of capital, which determines the country's ability to produce goods and services. Also, investment costs, which constitute a significant and variable part of the total demand in the country, are one of the factors determining the volume of production and the level of inflation. The effectiveness of investments depends on the technical and economic level of production and the possibilities of using scientific and technical innovations in production. At the same time, investments also ensure an increase in the technical and economic level of production.

The Decree of the President of the Republic of Azerbaijan dated February 2, 2021 on the approval of "Azerbaijan 2030: National Priorities of Socio-economic Development" defined five priorities on the socio-economic development of the country until 2030, such as creating a dynamic, inclusive and social justice-based society, human capital and innovation that meet modern requirements, ensuring the Great Return to the liberated territories, creating a clean environment and ensuring "green growth". The realization of these priorities involves increasing the rate of economic growth in the non-oil sector, improving the regional and territorial structure of the national economy, settling territories freed from occupation, increasing the technical and economic level of production, increasing human capital, determining environmental requirements and applying the principles of "green economy". Its implementation requires an increase in investment activity in the private sector along with an increase in public investment. Therefore, in the future, the achievement of the country's economic development goals will depend significantly on the effective regulation of public and private investments.

Investment resources in the open economy are formed due to foreign investments, capital transfers, and national savings. Potential benefits from foreign investment flows to developing countries are

associated with a reduction in credit and currency restrictions, as well as an increase in investment resources that provide economic growth. In the long-term perspective, national savings are the main source of investment resources for the national economy. Incomes received in the oil and gas sector of Azerbaijan increased the possibility of savings. Thus, in 2022, the country's gross domestic product increased 4.8 times compared to 2000 and 1.2 times compared to 2010, and the average annual saving rate in 2010-2022 was 36.0 percent. Therefore, the use of available investment resources in order to ensure economic growth and macroeconomic balance, as well as improving the structure of the national economy to achieve stable economic growth is one of the important tasks for the future. The fact that the main part of national savings is at the disposal of the state also increases the possibility of effective implementation of public policy in the specified directions. In particular, it is important to study the issues of substantiation of decisions on the use of oil revenues from the point of view of the principles of sustainable development, the division between consumption and savings, as well as the distribution of savings-forming funds between foreign and domestic investments from the point of view of the formation of effective economic policy.

In recent years, in addition to the small share of the private sector in capital investment in the country, the investment rate has decreased relatively. In such circumstances, the implementation of policy measures related to the use of national savings generated in the country in the direction of increasing private sector investment is of great importance in terms of sustainable economic growth and achieving the set goals.

To achieve development goals, increasing investment activity in the country depends on the current investment environment. A favorable investment environment increases the impact of created capital on economic growth by increasing investment efficiency and leads to the sharing of benefits between workers and consumers by reducing costs and risks. From this point of view, continuous improvement of the investment environment in the country in accordance with the challenges in the world and the country's development goals is one of the main conditions for ensuring investment activity.

Thus, the above shows that research work devoted to the study of the formation and use of investment resources in the national

economy has scientific and practical significance and that this topic is relevant at the current stage of development of Azerbaijan.

The issues of formation and use of investment resources in national economies have always been relevant and these issues were considered in the works of A. Smith, E. Bem-Bawerk, A. Marshall, I. Fisher, J. Keynes, F. Modigliani, M. Friedman, P. Samuelson, C. Hicks and other classics of economic science.

In addition to the scientists mentioned, studies on various aspects of savings formation in the national economy, including in developing countries, were conducted by K.Carol, J.Campbell, A.Deaton, and others, factors influencing the volume of investments were studied in the works of D.Jorgenson, M.Feldstein, J.Hirshleifer, and others, issues related to investment risks were studied by F.Knight, A.Dixit, R.Pindyck, D.Rodrik, and others, issues of taxation of capital income were studied by F.Ramsey, A.Atkinson, P.Diamond, K.Mirlees, M. King, D.Fullerton, and others, issues of savings and investment formation in developing countries, features related to the use of income from resources were studied in the works of P.Collier, F.van der Ploeg, K.de Long, N.Loyza, K.Schmidt-Hebel, L.Serven, J.Hartivik, and others.

Among Azerbaijanian scientists, Z.A. Samadzade, T.A. Huseynov, T.H.Huseynov, M.A. Ahmadov, U.G.Aliyev, A.Sh. Shekaraliyev, A.P.Babayev, A.J. Muradov, Y.H. Hasanli, Y.A. Kalbiyev, Sh.S. Gafarov, Y.A.Mammadov, S.M.Mammadov, R.T. Hasanov, A.I. Bayramov, N.O.Hajiyev and others conducted valuable research on the problems of the national economy. In particular, various aspects of investment activity in Azerbaijan were studied by T.H.Huseynov. However, theoretical and practical issues of the formation and use of investment resources in Azerbaijan, especially formation of national savings, have not been studied sufficiently and comprehensively. Also, the mechanism of substantiation of decisions on the distribution of oil revenues between consumption and savings, as well as on the distribution of savings on domestic and foreign investments has not been properly studied. From this point of view, it is important to conduct scientific research on issues of investment resources in the national economy, including the formation of national savings and the effective use of these resources. Thus, the relevance and insufficient

study of issues of formation and use of investment resources in the country determined the choice of the topic of the dissertation. The dissertation will increase the existing knowledge in the field of study of issues of formation and use of investment resources in Azerbaijan, being a research work covering a comprehensive study of scientific, methodological, and practical issues in this regard.

**The object and subject of the research.** The economy of Azerbaijan was chosen as the object of the research, the subject of the study covers the issues of formation and effective use of investment resources in the national economy.

**The purpose and tasks of the research.** The purpose of the research is to prepare scientifically substantiated theoretical and practical proposals and recommendations for the efficient use of investment resources based on a comprehensive study of the theoretical, methodological, and practical aspects of the formation and use of these resources in the national economy. To achieve this purpose, the following tasks were set and solved:

- clarifying the essence of the concepts of "investments" and "capital";
- defining investment resources in the national economy, including factors influencing the formation of national savings;
- studying the role of foreign direct investment in the development of the national economy;
- studying the mechanism of making investment decisions in the national economy and the factors influencing it;
- studying the factors forming the investment environment and the theoretical aspects of its influence on investment activity;
- studying the features of ensuring investment activity at the expense of resource revenues;
- assessing the factors influencing the economic development of Azerbaijan and the level of provision of investment resources;
- studying the distribution of oil revenues between consumption and savings in the country and the formation of savings in the non-governmental sector;
- assessing investment activity in the country and studying the factors influencing it;

- assessment of the impact of investments on economic growth and macroeconomic equilibrium in the country;
- determination of prospects for the formation of investment resources in the national economy and directions for their effective use;
- substantiation of the main directions of macroeconomic policy in terms of the formation and use of investment resources;
- preparation of proposals and recommendations for institutional changes to increase investment activity in the national economy, as well as determination of ways to stimulate investment activity by the government.

**Research methods.** Scientific abstraction, economic-statistical analysis, analysis-synthesis, system analysis, economic-mathematical methods, etc. were used as research methods.

The works and scientific-theoretical research of leading economists on the issues of formation and use of investment resources in the national economy, as well as the impact of national savings and investments on economic growth and macroeconomic balance, features of the approaches of economists to the use of income from resources in resource-exporting countries, constitute the theoretical and methodological basis of the study. The dissertation uses regulatory and legal documents adopted in Azerbaijan on this issue.

**The information base of the research** consists of statistical summaries, reports, bulletins of the State Statistical Committee of the Republic of Azerbaijan, the Central Bank, the Ministries of Economy, Finance, Agriculture, the State Oil Fund, the State Oil Company of Azerbaijan, state bodies regulating individual aspects of investment activities, international organizations, including statistical and reporting materials of the UN Industrial Development Organization, the Organization for Economic Development and Cooperation, the World Bank, the International Monetary Fund and the World Trade Organization.

**The main provisions for the defense:**

1. Investment resources in an open economy can be formed through foreign investment and capital transfers, as well as national savings. In addition, national savings are the main source of formation of investment resources for the national economy in the long term.
2. Instability of natural resource revenue, and principles of sustainable development make it necessary to save from this income.

At the same time, the high poverty threshold makes it appropriate to direct part of the income from resources to consumption by increasing the social discount rate. In addition, the ratio between domestic and foreign real interest rates is one of the factors determining the distribution of savings from resource income to foreign and domestic investment.

3. In the national economy, the interest rate, the volume of demand, the level of risk, the marginal efficiency of capital, experience in assessing and implementing investment opportunities determine the economic growth rate, influencing investment activity. Stable growth of private investment, which is the main driver of economic growth, occurs in a favorable investment environment.

4. The implementation of a successful oil strategy affecting all aspects of public life has increased the level of provision of investment resources in Azerbaijan. Although this factor increases investment activity in the non-oil sector, the development of the national economy remains highly dependent on oil and gas revenues.

5. The fact that the bulk of oil revenues in Azerbaijan is at the disposal of the government makes the allocation of these revenues for consumption and savings dependent on public policy. The main criteria for such a division should be the social discount rate and internal rate of return, the principles of sustainable development, and structural changes in the context of ensuring stable economic growth.

6. Although oil and gas revenues in Azerbaijan increase the level of provision with investment resources, the investment rate in recent years has been low in terms of ensuring high rates of economic growth, and low investment activity of the private sector limits the efficiency of using available investment resources.

7. The main source of formation of investment resources in Azerbaijan in the medium term will be savings of the government sector. In particular, the level of household income limits their savings.

8. The public investment policy in Azerbaijan is aimed at ensuring economic growth and improving the territorial and sectoral structure of the national economy. In this regard, in order to achieve these goals in the medium term, it is necessary to improve the investment environment, increase the investment rate in the non-oil sector, and support domestic demand.



9. The formation and effective use of investment resources in the country significantly depends on the implemented macroeconomic policy. The volume of state budget expenditures, the level of inflation and interest rates, and the exchange rate due to oil revenues affect the volume of investments, determining economic activity.

10. Stable and significant growth of private investment in the national economy occurs in a favorable institutional environment. In this area, policy is aimed at creating a predictable institutional environment, developing competition between business entities, and improving the mechanisms for supporting their development.

11. The connection of private investment in the national economy with the goals of economic development is ensured primarily through the mechanism of state support. Support for investment activities of the private sector due to oil revenues is also necessary from the point of view of ensuring the stability of economic growth and increasing the effectiveness of public investment.

**Scientific novelty of the research.** The main novelty of the research is to clarify the theoretical and methodological foundations of the formation and use of investment resources in resource-exporting countries. Other scientific results and innovations obtained as a result of the research include the following:

- the formation of investment resources in the national economy is explained, including the formation of national savings and attraction of foreign investment, the criteria for making decisions on the distribution of resource income for consumption and savings in resource-exporting countries are determined;

- the mechanism for making investment decisions in the national economy and the factors influencing it, the theoretical aspects of the formation of the investment environment and its impact on investment activity, as well as ensuring investment activity at the expense of resource income are clarified;

- the pattern of distribution of oil revenues between consumption and savings in Azerbaijan is determined and the level of provision with investment resources is assessed, the features of savings formation in the non-state sector are explained;

- the factors influencing investment activity in the country and its impact on economic growth and macroeconomic equilibrium are determined;

- The prospects for the formation of investment resources in the medium term in Azerbaijan were determined and directions for their effective use were proposed;

- in terms of the formation and use of investment resources in the national economy, proposals and recommendations were made to improve macroeconomic policy and institutional changes, as well as ways to stimulate investment activity by the state.

### **The theoretical and practical significance of the research.**

The theoretical significance of the dissertation consists in deepening the theoretical foundations of studying the formation and use of investment resources. The stated theoretical provisions and methodological approaches allow us to assess the features of the formation and use of investment resources in an economy based on the export of natural resources. In particular, based on the criteria presented in the work, it is possible to determine the directions for using natural resource revenues.

The use of the main provisions, proposals, and recommendations of the research will help improve the public economic policy, the existing regulatory framework for increasing the efficient use of oil revenues in the country, the formation of national savings, and increasing investment activity, and will also increase the effectiveness of the implemented investment policy. In particular, these provisions can be used in developing measures to improve macroeconomic policy, improve the institutional environment, and stimulate investment activity to improve the investment environment.

**Approbation and implementation of the results.** The main provisions of the study, substantiated proposals, and recommendations were presented at 6 scientific and practical conferences held in Azerbaijan and foreign countries, including 2 conferences held in foreign countries (one in Russia and the other in Belarus), 24 articles, 6 of which were published in journals (including 3 indexed) from foreign countries. Also, the main provisions of the dissertation are used in the educational process at the Azerbaijan State University of Economics.

**Dissertation work was carried out at Azerbaijan State Economic University.**

**The structure and scope of the dissertation work.** The dissertation work (560460 marks) consists an introduction (16984 marks), five chapters (chapter I (96573 marks), chapter II (89766 marks), chapter III (77358 marks), chapter IV (102612 marks), chapter V (100452 marks), conclusion (13096 marks ) and a list of used literature (60211 characters).

### **The structure of the dissertation**

Introduction

Chapter I. Theoretical aspects of the formation of investment resources in the national economy

1.1. Microeconomic and macroeconomic approaches to the essence of investment and capital

1.2. Ways of formation of investment resources in the national economy

1.3. National savings and features of its formation in resource-exporting countries

1.4. The role of foreign direct investments in the development of the national economy

Chapter II. Theoretical and methodological foundations of investment activity in the national economy

2.1. The mechanism of making investment decisions in the national economy

2.2. Investment environment and its impact on investment activity

2.3. Theoretical approaches to the impact of investment on economic growth

2.4. Features of ensuring investment activity at the expense of income from resources

Chapter III. Features of formation of investment resources in Azerbaijan

3.1. Azerbaijan's oil strategy and development characteristics of the national economy

3.2. Assessment of the level of provision of investment resources of the national economy

3.3. Distribution of oil revenues between consumption and savings

3.4. Factors affecting the volume of savings in the non-state sector

Chapter IV. Analysis of investment activity in Azerbaijan and assessment of its impact on economic development

4.1. Investment activity in Azerbaijan and factors affecting it

4.2. Mechanism of state support of investment activity in Azerbaijan

4.3. Impact of investments on economic growth and macroeconomic balance

4.4. Assessment of the tax burden on income from capital in Azerbaijan

4.5. The impact of the tax regime on the use of debt funds in investment financing

Chapter V. Prospects of formation of investment resources in Azerbaijan and directions of their effective use

5.1. Prospects of formation and use of investment resources in Azerbaijan

5.2. Main directions of macroeconomic policy in terms of formation and use of investment resources

5.3. Institutional aspects of increasing investment activity in the national economy

5.4. Ways of stimulating investment activities in Azerbaijan by the state

Conclusion

List of used literature

## PRINCIPAL PROVISIONS SUBMITTED TO THE DEFENSE

**1. Investment resources in an open economy can be formed through foreign investment and capital transfers, as well as national savings. In addition, national savings are the main source of formation of investment resources for the national economy in the long term.**

Since investment at the macroeconomic level is capital. Since investments represent capital accumulation at the macroeconomic level, specifying the composition of capital allows us to determine investment costs. Although capital is considered a part of society's wealth in economic literature, there are different opinions on what this part consists of. "Capital goods can be used in all cases to meet the needs (demands) of subsequent periods. This definition does not exclude the possibility that the same product is both capital and a consumer product".<sup>1</sup> According to the Austrian economist E. Böhm-Bawerk, capital is the totality of man-made means of production, i.e. goods created in the past production process not for direct consumption, but for the production of new goods.<sup>2</sup> However, according to the American economist I. Fisher, "capital is not limited to any particular part and type of wealth, it denotes all wealth or property rights to this wealth existing at a certain time, or the value of this wealth or property rights to this wealth".<sup>3</sup> Such different approaches eventually led to the definition of the concepts of "capital" and "investment" from a macroeconomic point of view not on the basis of any precise principles, but on the basis of consensus.

Since capital is one of the factors of production, all wealth used for the purpose of earning income is its component. However, wealth used in some spheres of activity (e.g., in public administration, education, etc.) does not receive direct income, but since this wealth is used in the creation of services (goods), it is considered capital. That is,

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<sup>1</sup> Hicks, J.R. Capital and time: A neo-Austrian approach. London: Oxford University Press, 1973, p.7.

<sup>2</sup> Бем-Баверк, Е. Капитал и прибыль. История и критика теорий процента. Москва: Директмедиа Паблишинг, 2008, с. 24.

<sup>3</sup> Fisher, I. The nature of capital and income. – New York: Macmillan, 1906, p.183.

capital is not intended for current consumption, but for the creation of future goods. In addition, the use of durable consumer goods is not limited to current consumption. Since, residential houses and apartments can be built for personal purposes, and not for the purpose of earning income. In this regard, the consensus on investment is that the products of construction are capital.

Potential sources of investment resources include national savings, net capital transfers, and net borrowing from foreign countries.

National savings, which are the portion of income remaining at the disposal of the country and not spent on final consumption of goods and services, are the main source of investment and lead to an increase in the welfare of society. Unlike national savings, investment does not directly increase the national wealth of the country.

In an open economy, the volume of investment depends not only on national savings. Since capital is a relatively mobile factor, the possibility of its flow between countries is high. However, in practice, capital is usually not fully mobile, since there are economic, organizational and institutional factors that impede the free movement of capital between countries, as well as risks associated with information asymmetry in foreign economic activity. Therefore, in the long term, national savings are the main source of development of the national economy. The study of capital mobility conducted by M. Feldstein and S. Horioka also shows that domestic investment in an open economy is highly dependent on national savings.<sup>4</sup>

In classical theory, savings play a decisive role in dividing disposable income into consumption and savings, i.e. a change in the interest rate determines consumption, causing a change in savings. In Keynes's theory, savings depend on disposable income, which is the remaining part of this income after consumption. In some empirical studies, the relationship between the interest rate and the savings rate has not been determined<sup>5</sup>

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<sup>4</sup> Feldstein, M., Horioka, C. Domestic saving and international capital flows // *The Economic Journal*, – 1980, 90(358), – p. 328

<sup>5</sup> *The economics of saving and growth: Theory, evidence, and implications for policy* / Edited by K.Schmidt-Hebbel and L.Serven. Cambridge: Cambridge University Press, 1999.

When per capita income is close to the subsistence level, savings opportunities are limited. Higher income increases the ability to save, while an increase in wealth reduces people's propensity to save. Economic growth is considered as one of the factors determining the level of investment, affecting the savings rate.<sup>6</sup> These approaches are consistent with Keynes's theory. Thus, high economic growth increases savings by raising the level of income. In addition, economic growth leads to the fact that the younger generation earns more than the pensioner generation, which leads to an increase in savings according to the life cycle theory.<sup>7</sup>

The limitation of liquid financial instruments limits the ability of not only households but also firms to conduct effective financial transactions. In this regard, the development of financial markets has a positive effect on the savings rate by increasing the supply of financial instruments and reducing risks. At the same time, the development of these markets can also have a decreasing effect on the volume of savings, since it increases the possibility of obtaining loans for consumption.

State savings are determined by state policy. By redistributing the state tax burden between different groups or in different directions, determining the budget deficit, adjusting the interest rate and exchange rate, etc., it largely affects savings.

Savings also increase as uncertainty about future income increases. Credit constraints or high spreads between lending and deposit rates force households to save on durable consumer goods. A similar case also applies to the behavior of the corporate sector regarding savings for investment. The optimal investment policy of firms requires the rapid completion of an investment project, and since it is expensive to raise large amounts of funds in a relatively short period of time, firms hold larger cash balances.<sup>8</sup>

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<sup>6</sup> National saving and economic performance / Edited by B.D.Bernheim and J.B.Shoven. Chicago: University of Chicago Press, 1991, p. 205.

<sup>7</sup> Feldstein, M. Social security and saving: The extended life cycle theory // The American Economic Review, 1976, 66(2), p.76.

<sup>8</sup> Riddick, L.A., Whited, T.M. The corporate propensity to save // The Journal of Finance, 2009, 64(4).

Unlike governments, other institutional units are generally not interested in freely transferring resources to other units, and therefore the volume of capital transfers from these units is limited. Therefore, the share of capital transfers in a country's investment resources is usually small.

External sources of investment finance include direct and portfolio investment and other investment. In addition to financial assets, foreign direct investment also brings technology and knowledge to a country. In making decisions about these investments, compared with portfolio investment, the economic performance of the company in which the investment is made is taken into account to a greater extent.

A country's economic benefits from attracting foreign investment do not arise automatically without its ability to absorb these benefits.<sup>9</sup> Also, attracting foreign direct investment is not a major factor in the development of poor countries. Thus, in developing countries, foreign direct investment accounted for an average of 7.2 percent of fixed capital investment per year in 2015-2022. Countries that do not have domestic resources for investment have limited opportunities to attract foreign investment.

**2. Instability of natural resource revenue, and principles of sustainable development make it necessary to save from this income. At the same time, the high poverty threshold makes it appropriate to direct part of the income from resources to consumption by increasing the social discount rate. In addition, the ratio between domestic and foreign real interest rates is one of the factors determining the distribution of savings from resource income to foreign and domestic investment.**

High volatility of economic parameters of the national economy has a negative impact on economic growth.<sup>10</sup> Volatility and limited ability to predict oil prices make it difficult to manage the volatility of oil revenues. In this case, it is advisable to save part of this revenue in

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<sup>9</sup> Iamsiraroj, S., Ulubasoglu, M.A. Foreign direct investment and economic growth: A real relationship or wishful thinking? // Economic Modelling, – 2015, 51(C).

<sup>10</sup> Lin, S.-C., Kim, D.H. The Link between Economic Growth and Growth Volatility // Empirical Economics, – 2013, 46, – p. 43-63.



order to reduce the volatility of the spent part of oil revenues. One of the factors that makes this important is that oil and gas are exhaustible resources, and from the point of view of sustainable development, part of the oil revenues is saved for the benefit of future generations.

Sustainable development, based on meeting the needs of the present generation without compromising the ability of future generations to meet their own needs, implies non-decrease in national wealth.<sup>11</sup> In this regard, the choice between the standard of living of the present and future generations also depends on the distribution of generated income between consumption and savings. According to P. Collier, from the point of view of the principles of sustainable development, the savings rate from revenues from the extraction of natural resources should be high compared to other types of income.<sup>12</sup>

Different countries apply different approaches to the optimal use of resource revenues. One, the permanent income hypothesis, targets a primary basic state budget deficit and the expenses are financed by fixed incomes from natural resources, while the other approach involves the spending of the incomes obtained from the wealth generated from them (bird-in-hand), not the incomes from the resources.

Investing in the non-oil sector using oil revenues increases the country's non-oil wealth and thus follows the principles of sustainable development. However, a significant increase in investment in the country using resource revenues increases the likelihood of their effectiveness declining.

As resource revenues in the country increase, as well as future revenues from these revenues through investment in fixed capital, consumption also increases, resulting in a higher current marginal utility of consumption than in the future. This situation makes it advisable to set the savings rate lower than under the fixed-income approach in the initial periods of resource extraction and to allocate

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<sup>11</sup> Integrated environmental and economic accounting 2003: Handbook on National Accounting. – New York: United Nations, 2007.

<sup>12</sup> Commodity price volatility and inclusive growth in low-income countries / Edited by R.Arezki, C.Pattillo, M.Quintyn and M.Zhu. Washington: International Monetary Fund, 2012, p. 91.

some of the resource revenues to consumption.<sup>13</sup> At the same time, one of the factors determining the suitability of this approach is the high time preference rate of the poor. The directions of using current resource income are determined by the social discount rate (SDR), rates of return on foreign and domestic investment (IRR<sub>d</sub> and IRR<sub>x</sub>, respectively). In this case, if the SDR is higher than IRR<sub>d</sub> and IRR<sub>x</sub>, the income should be consumed in the current period, otherwise it should be invested.<sup>14</sup> The planned volumes of consumption and investment ultimately lead to equilibrium in the distribution of income between consumption and investment.

**3. In the national economy, the interest rate, the volume of demand, the level of risk, the marginal efficiency of capital, experience in assessing and implementing investment opportunities determine the economic growth rate, influencing investment activity. Stable growth of private investment, which is the main driver of economic growth, occurs in a favorable investment environment.**

Management, technological, and market knowledge are required to absorb the saved part of the income as an investment in the national economy. The lack of such knowledge in the country often leads to unproductive use of existing investment resources and the flow of a significant part of savings abroad. From this point of view, it is important to create capacity for effective investment decisions.

Economic subjects make decisions on where to invest, as well as on the sources of its financing. The required rate of return on investment (discount rate) is a weighted average measure of the prices of funds attracted from different sources, and the main factors that shape it are the interest rate and the level of risk. According to both Keynesian and neoclassical theories, investment is made until the present value of expected future returns equals the present value of capital. According to C.Hicks, the decrease in the interest rate

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<sup>13</sup> Van der Ploeg, F., Venables, A.J. Harnessing windfall revenues: optimal policies for resource-rich developing economies // *The Economic Journal*, 2011, 121(551), p. 1-30.

<sup>14</sup> Collier, P. Managing resource revenues in developing economies / P.Collier, R.van der Ploeg, M.Spence, [et al.] // *IMF Staff Papers*, 2010, 51(1), p. 92.

(discount rate) increases the cost of capital in any investment project, and its increase, on the contrary, decreases it (fundamental theorem).<sup>15</sup>

Uncertainty in the national economy can affect both the volume and timing of investment. Studies have found a significant negative relationship between uncertainty and private investment.<sup>16</sup>

In general, since net investment reflects changes in the volume of capital, its volume depends not on the level of the price of capital or the marginal efficiency of capital, but on their changes.

Investment that increases depending on the volume of demand in the market is called derivative investment, and investment that increases independently of the volume of demand is called autonomous investment. The volume of autonomous investment increases until the internal rate of return is equal to the discount rate. Changes in the interest rate, innovation, population growth, and the state's investment policy are among the factors that affect autonomous investments.

The government can increase the favorable level of the investment environment in the country and stimulate economic growth with policies aimed at reducing costs, risks, and barriers to competition.<sup>17</sup> Studies show that inflation increases uncertainty, and inflation volatility has a negative impact on investment volume.<sup>18</sup> Inflation increases uncertainty about real interest rates and the tax burden of firms.

Investment decisions are made not only on the basis of current conditions, but mainly on the basis of future expectations. In this regard, it is necessary to strengthen the stability and reliability of the state, to increase the ability to forecast economic processes.

According to R. Hall and J. Jones, incentives provided by institutions and the government to individuals and firms in the

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<sup>15</sup> Hicks, J.R. Capital and time: A neo-Austrian approach. London: Oxford University Press, 1973, p. 20-21.

<sup>16</sup> Bloom, N., Bond, S., van Reenen, J. Uncertainty and investment dynamics // The Review of Economic Studies, 2007, 74(2), p. 391-415.

<sup>17</sup> World Development Report 2005: A better investment climate for everyone. – Washington: Oxford University Press, 2005, p.2.

<sup>18</sup> Striving for growth after adjustment: The role of capital formation / Edited by L. Serven and A. Solimano. – Washington: World Bank, 1993, p. 170.

economy encourage productive activity, such as the accumulation of knowledge and skills or the creation of new products and production technologies, but also encourage negative behavior, such as rent-seeking, corruption, and theft.<sup>19</sup> Institutions that create and promote favorable conditions for market transactions, such as protection of property rights, low barriers to international trade, low taxes, and minimal regulatory barriers, also encourage private investment.<sup>20</sup>

Government agencies influence the level of competition by regulating market entry and exit, and by reacting to anti-competitive behavior of firms. The efficient operation of the market mechanism and the efficient distribution of economic resources in terms of maximizing the welfare of the society depend on the state's anti-monopoly activity.

Changes in the level and structure of taxes in the country affect investment activity. According to P. Diamond and J. Mirlis, "in order to achieve efficiency in the economy, taxes on intermediate products should not be included in the optimal tax structure. ... tax revenues can be collected by imposing taxes on final consumer products that do not reduce the efficiency of production".<sup>21</sup> Overall, the reduction of taxes and import duties on investment products in small countries dependent on foreign trade has a positive effect on firms' competitiveness.

Lack of trust in financial institutions and high risk causes the population to keep a significant part of savings in cash. Also, the weak development of the property and stock market in the country makes it difficult to assess the value of existing property and reduces its liquidity.

The development of infrastructure is one of the factors that determine the efficiency of investments. In general, the speed and costs of material, financial, and information flows are among the main

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<sup>19</sup> Hall, R.E., Jones, C.I. Why do some countries produce so much more output per worker than others? // *Quarterly Journal of Economics*, 1999, 114(1), p. 95.

<sup>20</sup> Erden, L., Holcombe, R. The effects of public investment on private investment in developing economies // *Public Finance Review*, 2005, 33(5), 579 p.

<sup>21</sup> Diamond, P., Mirrlees, J. Optimal taxation and public production I: Production efficiency // *American Economic Review*, 1971, 61(1), p. 24.

factors that determine a country's competitiveness and affect its investment environment.

An effective investment strategy in resource-exporting countries should have the following characteristics:<sup>22</sup>

- fulfillment of current tasks facing development by creating material assets and solving problems related to poverty;
- creation of financial reserves in response to expectations of income inequality and depletion of resources;
- determination of the amount of budget expenses taking into account the efficiency and possibilities of absorption of state investments.

**4. The implementation of a successful oil strategy affecting all aspects of public life has increased the level of provision of investment resources in Azerbaijan. Although this factor increases investment activity in the non-oil sector, the development of the national economy remains highly dependent on oil and gas revenues.**

A significant increase in oil production in Azerbaijan occurred at the same time as the rise in the price of oil in the world market. Such a situation led to the faster payment of foreign investments in oil projects and the increase of Azerbaijan's share in the product distribution. As a result of the projects implemented in the oil and gas sector in 2000-2022, the State Oil Fund of the Republic of Azerbaijan (DNF) received 183.9 billion. Funds in the amount of US dollars entered, which became the main source of financing of the national economy.

In 2022, the country's GDP increased 4.8 times compared to 2000, and the average annual growth rate during this period was 7.4 percent. The noted average annual growth was 2.6 times higher than the world average, 3.3 times higher than developed countries, and 1.6 times higher than developing countries.<sup>23</sup>

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<sup>22</sup> Commodity price volatility and inclusive growth in low-income countries / Edited by R.Arezki, C.Pattillo, M.Quintyn and M.Zhu. – Washington: International Monetary Fund, 2012, 408 p.

<sup>23</sup> [www.unctad.org](http://www.unctad.org)

The share of net profit in GDP in Azerbaijan in 2000-2022 at basic prices varied between 58.7 percent and 78.7 percent. This was directly influenced by the volume of extracted resources and their price levels, as well as the significant share of the oil and gas sector in the national economy. Such a situation has led to a high share of rent in GDP. Also, high interest rates have played a role in making net profit a large share of GDP. Under such conditions, the small share of labor payments in the GDP at basic prices in the country shows that the quality indicators of employment in Azerbaijan are low. In this regard, one of the main goals of the economic policy in the medium term should be to increase the share of labor payments in income.

Incomes generated in the oil and gas sector are one of the factors that determine the development of the non-oil sector by reducing the tax burden in the non-oil sector and forming a source of financing for the development of the national economy. Thus, in the mentioned period, the average indicator of the share of oil revenues in state budget revenues was 54.1 percent, the ratio of state budget revenues to GDP was 27.0 percent, and the ratio of its expenses to non-oil GDP was 44.3 percent. In particular, since the oil revenues of the budget are mainly spent in the non-oil sector, the taxes collected from these expenditures are included in its non-oil revenues.

Domestic demand in the country, including budget oil revenues, has become the main factor influencing non-oil GDP. Thus, the average annual ratio of non-oil GDP to non-oil domestic demand was 79.1 percent in 2000-2004 and 69.5 percent in 2005-2022, the regression equation between the logarithm of real non-oil GDP and the logarithm of oil revenues spent from the budget (in real terms based on the non-oil GDP deflator) shows that a 1 percent change in budget expenditures due to oil revenues changes approximately 0.4 percent of the non-oil GDP. At the same time, the share of non-oil exports in GDP was small (18.0 percent), and part of the non-oil imports was financed by oil revenues. Thus, in 2005-2022, the non-oil deficit of current account balance ranged from 44.4% to 118.1% of non-oil inflows.

In 2022, the real volume of national savings in Azerbaijan increased by 9.3 times compared to 2000 and by 1.5 times compared to 2010. At the same time, the average annual share of national savings

in disposable income was 30.2 percent in 2000-2004, 48.1 percent in 2005-2015 and 31.1 percent in 2016-2022.

The formation of a significant part of the country's income in the oil and gas sector has increased the dependence of the volume of national savings from the world price of oil on the market. In the period 2000-2022, the correlation coefficient between real national savings and the real price of oil in the period 2000-2022 is 0.95, and the correlation coefficient between national savings and oil GDP in real terms calculated on the basis of the non-oil GDP deflator was 0.98.

To assess the impact of oil and gas export revenues in the country on national savings, the following regression relationship was established between the logarithm of real national savings (s) and the real volume of exports of crude oil and natural gas and their products in manats (based on the non-oil GDP deflator) logarithm (x) for 2003-2022:

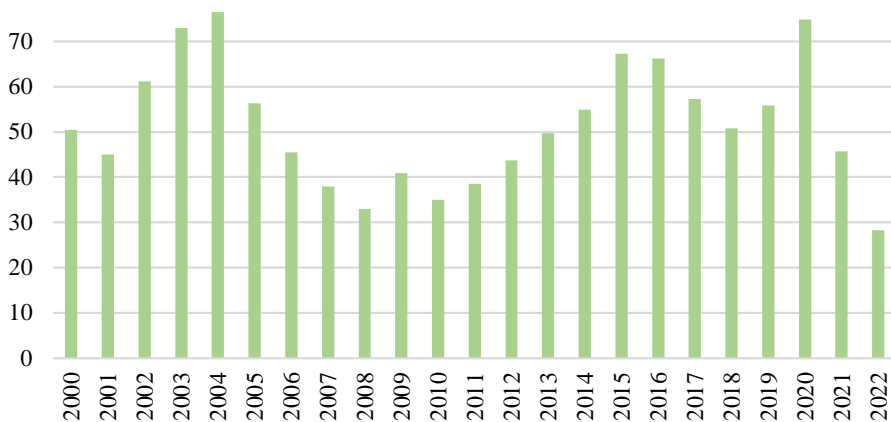
$$s = 0.683831x + 2.760892 \quad (1)$$

(0.053379      (0.474387)

As can be seen from the regression equation (1), a 1 percent change in the real volume of export of crude oil and natural gas, their products in manat terms, causes a change in the real amount of national savings by approximately 0.7 percent.

In countries where the mining industry has a significant share in the economy, the share of the state in the national savings is high. In this regard, the average annual share of the state in the national savings in Azerbaijan in 2010-2022 was 53.0 percent. Besides, the share of households in the national savings was either very small or negative in 2006-2022, except for 2020. Such a situation is one of the factors limiting the development of financial markets in the country. Thus, one of the main functions of financial markets is to mobilize household savings and direct them to the financing of the national economy.

Before 2006, a significant part of the available investment resources in Azerbaijan was foreign investment, the increase in the country's oil revenues led to the formation of internal resources for financing the national economy, and after 2006, these resources were formed mainly at the expense of internal sources.



**Graph 1. Level of use of investment resources in Azerbaijan (percentage)**

Graph 1 shows the ratio of investment in fixed capital in the country to the volume of investment resources, which consists of the sum of the national savings, foreign investment in fixed capital, and balance of capital transfers. Although the decrease in the oil price increased the level of annual investment resources and there were no financial restrictions related to investments in the country between 2000 and 2022. However, the high interest rate in the country, limited investment opportunities, and limited financial opportunities of the private sector have limited the full use of these investment resources.

**5. The fact that the bulk of oil revenues in Azerbaijan is at the disposal of the government makes the allocation of these revenues for consumption and savings dependent on public policy. The main criteria for such a division should be the social discount rate and internal rate of return, the principles of sustainable development, and structural changes in the context of ensuring stable economic growth.**

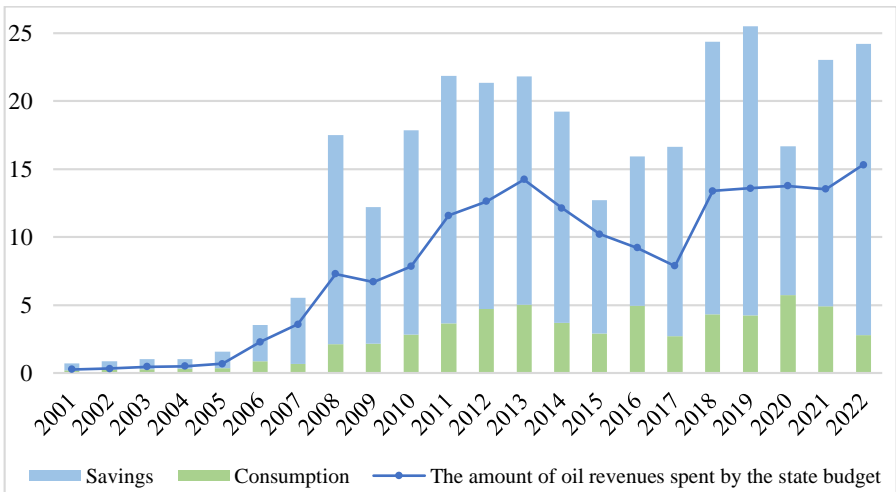
In Azerbaijan, the distribution of oil revenues, which are at the disposal of the government, between consumption and savings, depends on the public policy. The share of the state's oil revenues in oil GDP varied from 21.8 percent to 34.2 percent in 2001-2007, and



from 37.9 percent to 71.2 percent in 2008-2022, with an average annual rate of 60.0 percent.

In 2006-2022, more than 60 percent of the state's disposable income was formed due to oil revenues. In general, in 2005-2022, the correlation dependence of the state's disposable income with oil income was 0.95, the correlation dependence with the state's savings was 0.93, and the correlation dependence between the state's oil income and savings was 0.95. In the mentioned period, the average annual part of the saved revenues of the state was equal to 61.0 percent.

As can be seen from Graph 2, the annual saved part of the state's oil revenues varied between 47.4 percent and 86.4 percent in 2001-2022. Also, in the mentioned period, the parts of the state's oil revenues that were spent through the budget, including those that went to consumption, were variable. In the mentioned period, only in 2015 and 2020, the state's annual oil revenues were smaller than the amount of these revenues (due to the funds of the DNF). In both cases, the country's oil revenues decreased due to the sharp drop in the world oil price. Thus, in 2015, the volume of funds received by the DNF decreased by 2.1 times compared to the previous year, and in 2020 by 2.0 times.



**Graph 2. Distribution of the state's oil revenues  
(billions of manats)**

As a whole, a part of the state's savings was absorbed as an investment within the country, and a significant part formed the assets of the DNF. Thus, in 2005-2022, the average annual portion of the DNF's income that was not spent in the country was approximately 26 percent.

To calculate the social discount rate, the following regression equation was established based on real per capita household incomes and real food costs, as well as food and non-food price indices for 2005-2021:

$$\ln(D_s) = 0.366\ln(Y_{sh}) - 0.47\ln(P_s/P_{q-s}) + 3.705 \quad (2)$$

(0.121)                      (0.212)                      (0.752)

Considering that the average share of food in household consumption expenditure in 2010-2021 is equal to 42.9 percent, the elasticity coefficient according to the compensated price is equal to 0.313, and the coefficient of elasticity according to consumption of the final social utility is equal to 1.17. In the mentioned period, the average poverty rate is 5.9 percent, the net time preference rate is 1.06 percent, as well as the average growth rate of consumption is 2.5 percent, and its dispersion is 0.0038, the social discount rate is 3.5 percent. It should be noted that the social discount rate calculated on the basis of the data of 2005-2010 was equal to 25.7 percent. The high discount rate in this period is related to the poverty level, the growth rate of consumption, and the high share of food costs in consumption costs. Also, the poverty level in the country decreased from 49 percent in 2001 to 29.3 percent in 2005, and the share of food expenses in household consumption expenses decreased from 68.2 percent to 53.2 percent. These data show that the social discount rate was higher in 2000-2004. Considering that the average real loan interest rate in Azerbaijan was equal to 9.9 percent in 2000-2004, 9.0 percent in 2005-2010, and 10.9 percent in 2010-2021, then in 2005-2010 In 2010-2021, the share of oil revenues going to consumption should be higher than in 2010-2021. However, an average of 28.3 percent of the state's oil revenues in 2000-2004, an average of 17.7 percent in 2005-2010, and 21.9 percent in 2010-2021 were spent on consumption, and the rest was saved has been done. Such a situation does not correspond to the requirements of the permanent income hypothesis. The smooth consumption of

potential oil revenues over the years required a larger share of oil revenues to be directed to consumption in the early 2000s when per capita incomes were low.

**Table 1. Azerlight oil price and oil revenues of the state budget**

|      | Actual price of Azerlight oil (\$/barrel) | Forecasted price of Azerlight oil in the budget (\$/barrel) | Oil revenues of the state budget, mln. \$ | The volume of non-oil net import, mln. \$ | Revenues from the management of the assets of DNF, mln. \$ |
|------|---|---|---|---|--|
| 2005 | 53,4                                      | 25  | 734,1                                     | 1969.3                                    | 29,7   |
| 2006 | 64,3                                      | 40  | 2568,2                                    | 2899.4                                    | 122,2  |
| 2007 | 71,1                                      | 50  | 4179,9                                    | 3837.1                                    | 84,24  |
| 2008 | 96,5                                      | 50  | 8884                                      | 5440.0                                    | 285,2  |
| 2009 | 62,7                                      | 70  | 8338,8                                    | 5093.7                                    | 380,6  |
| 2010 | 79  | 45  | 9780,3                                    | 5031.9                                    | 195,1  |
| 2011 | 104                                       | 60  | 14678,5                                   | 8809.3                                    | 224,8  |
| 2012 | 105                                       | 80  | 16089,1                                   | 8267.6                                    | 693,5  |
| 2013 | 104,1                                     | 100   | 18164,6                                   | 9839.5                                    | 606,4  |
| 2014 | 100                                       | 100   | 15482                                     | 8293.5                                    | 493,7  |
| 2015 | 52,4                                      | 90  | 9959,9                                    | 7036.8                                    | 425,4  |
| 2016 | 43,4                                      | 25  | 5780,4                                    | 5929.6                                    | 688,5  |
| 2017 | 55,1                                      | 40  | 4580,8                                    | 6498.5                                    | 641,9  |
| 2018 | 71  | 45  | 7882,6                                    | 7939.4                                    | 106,5  |
| 2019 | 64  | 60  | 8002,7                                    | 8379.4                                    | 2132,9   |
| 2020 | 43,7                                      | 55  | 8103,5                                    | 6853.6                                    | 1163,9   |
| 2021 | 71,6                                      | 40  | 7962,5                                    | 6724.2                                    | 1933,8   |
| 2022 | 103,6                                     | 50  | 9017.4                                    | 8745.5                                    | -2461.3  |

Source. The data was compiled by the author based on the envelopes of the state budget of the respective years and the DNF.

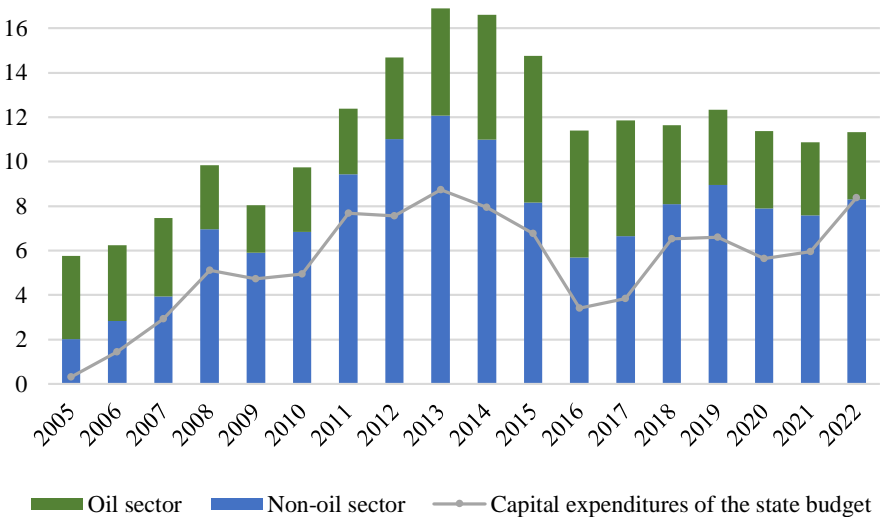
The amount of the state's oil revenues spent from the state budget is determined depending on the price of oil. Such an approach causes macroeconomic risks. In 2007-2015, the oil revenues of the state budget in US dollars exceeded the net import of the non-oil sector, in 2016-2019, the difference between these indicators was negative, and in 2020-2022, it was again positive. Such a situation causes volatility in the economy by affecting the real exchange rate of the national currency.

**6. Although oil and gas revenues in Azerbaijan increase the level of provision with investment resources, the investment rate in recent years has been low in terms of ensuring high rates of**

**economic growth, and low investment activity of the private sector limits the efficiency of using available investment resources.**

Raising the standard of living of the population in the country depends significantly on increasing labor productivity. One of the main ways to ensure this is to increase the capital-labor ratio. Currently, Azerbaijan lags behind developed countries significantly in terms of the value of capital-labor ratio. According to the Solow model, assuming that the rate of technical progress in the country is equal to 0 and that the current GDP is at a stationary volume (the actual volume is less than the stationary volume), the calculations made on the stationary volume of capital show that in 2022, on average, the basic per capita of the employed the value of the funds was 55.0 thousand manats, and the stationary volume was 294.0 thousand manats. Such a situation shows that there are opportunities to increase the country's fixed capital and, accordingly, GDP, due to the use of existing savings.

In 2022, the volume of investment in fixed capital in Azerbaijan increased approximately 11.3 times compared to 2000. However, this growth occurred mainly until 2013, and the indicator recorded in 2022 decreased by 1.5 times compared to 2013.



**Graph 3. Dynamics of fixed capital investments (in 2005 prices, billion manats)**

According to the data of Graph 3, investment activity in the non-oil sector in 2005-2022 had a significant impact on the dynamics of investment in fixed capital in the country. So, during this period, the average annual real investment in the oil sector is 3.9 billion. manat, 7.4 billion in the non-oil sector. formed manat. In 2005-2022, the share of state ownership in fixed capital investment in the non-oil sector was 66.7 percent on average, and the average annual share of foreign investment in the oil and gas sector was 64.0 percent. From this point of view, investment activity in the non-oil sector in the country was provided by state investment and foreign investment in the oil and gas sector.

The correlation coefficient between the investment rate and the saving rate in Azerbaijan between 2000 and 2022 was equal to -0.15, and in the non-oil sector, it was equal to 0.81. Such a situation is mainly related to the fact that the national savings depends on oil revenues, and the investment in the non-oil sector is mainly carried out at the expense of domestic sources. In the mentioned period, the average annual share of crude oil and natural gas production and services in this field in foreign investment in fixed capital was 78.3 percent. Foreign investment in the country was mainly resource-oriented, and its role in the non-oil sector was small.

According to B. de Long and L. Summers, in countries with a high economic growth rate, the amount of investment in machinery and equipment has been large, and as the amount of technological innovations reflected in the equipment received from developed countries has increased, the efficiency of resource use has also increased.<sup>24</sup> In Azerbaijan, the average annual share of expenditure on the acquisition of machinery and equipment, tools in investments in fixed capital amounted to 9.6 percent for 2000-2022, in the Czech Republic - 42.9 percent, in Denmark - 30.7 percent, in Germany - 34.9 percent, and 40.4 percent in Slovakia for 2000-2021.<sup>25</sup>

Currently, private sector investment activity in the country remains limited. Thus, in 2015-2022, the average annual share of

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<sup>24</sup> De Long, J.B., Summers, L.H. How strongly do developing economies benefit from equipment investment? // Journal of Monetary Economics, 1993, 32(3), p. 395-415.

<sup>25</sup> [www.stats.oecd.org](http://www.stats.oecd.org)

private property in fixed capital investments was 16.9 percent. Private investments are mainly directed to housing construction, trade, vehicle repair, production of building materials, agriculture, etc. This situation is due to limited financial capabilities, as well as the knowledge and experience required to invest in risky areas of the private sector. This factor makes investments in complex areas more risky compared to alternative options, and the level of internal profitability in these areas is lower or underestimated compared to alternative options.

In Azerbaijan, the volume of shares and corporate bonds (except for mortgage bonds) placed through Baku Stock Exchange was equal to 2.2 percent of the capital investment in 2021, and 1.8 percent in 2022. In particular, the primary markets of shares and bonds were not stable, and the volume of secondary markets was small in terms of ensuring their liquidity. The role of banks in financing investment activities has also been limited. So, in 2020-2022, the average annual 5.0 percent of capital investments were financed by bank loans.

In 2022, investments in fixed capital in regions (excluding Baku city) increased 47.4 times compared to 2003, their share in fixed capital investments increased from 5.5 percent in 2003 to 46.4 percent in 2022. However, this increase was mainly due to government spending.

The cointegration relationship between the ratio of the capital expenditures of the state budget to the non-oil GDP ( $bk$ ) and the logarithm of the price of Azeri oil ( $lpo$ ) was analyzed based on the Engel-Granger two-step procedure. Using the method of least squares, the following long-term dependence between the recorded time series was determined:

$$bk_t = -0.787422 + 0.245204lpo_t \quad (3)$$

However, since these residuals are not subject to sampling, the relationship between the error correction model (ECM) and the variables is expressed as follows:

$$\Delta bk_t = 0.118959\Delta lpo_t - 0.758562ECT_{t-1} \quad (4)$$

(3) regression dependence shows that a 1 percent change in the price of oil in the long term changes the share of capital expenditures of the state budget in non-oil GDP by 0.25 percent. This effect is

significant. According to dependence (4), the short-term deviation from the general equilibrium trajectory of the previous year has a significant impact on the change of bk. Thus, while a 1 percent change in the price of oil causes a 0.12 percent change in the share of budget capital expenditures in non-oil GDP, 75.9 percent of the deviation from the general equilibrium trajectory in the previous year is corrected in the current year, that is, the return of bk to the general equilibrium trajectory it happens fast. This is due to the fact that the actual price of oil in the budget year differs from the forecast price, and it is corrected in the following year.

**Table 2. Share of demand factors in non-oil GDP growth**  
(in percent)

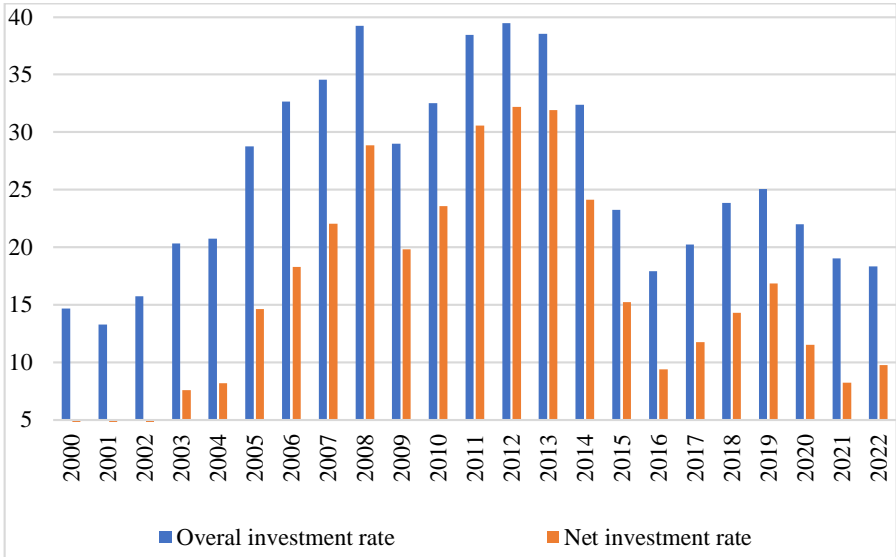
|      | GDP  | Fixed capital investment | Net exports | Consumption |
|------|------|--------------------------|-------------|-------------|
| 2005 | 8,3  | 10,4                     | -23,4       | 21,3        |
| 2006 | 11,9 | 7,8                      | -6,9        | 11,0        |
| 2007 | 11,4 | 5,8                      | -2,2        | 7,8         |
| 2008 | 15,9 | 10,9                     | -0,1        | 5,1         |
| 2009 | 3,7  | -9,2                     | 3,3         | 9,6         |
| 2010 | 7,7  | 6,0                      | 0,6         | 1,1         |
| 2011 | 9,4  | 9,6                      | -11,2       | 11,0        |
| 2012 | 9,7  | 4,8                      | 3,2         | 1,7         |
| 2013 | 9,9  | 2,9                      | -3,4        | 10,5        |
| 2014 | 7,0  | -3,8                     | 3,9         | 6,9         |
| 2015 | 1,1  | -8,9                     | -1,2        | 11,2        |
| 2016 | -4,4 | -6,1                     | -3,7        | 5,4         |
| 2017 | 2,8  | 3,0                      | -2,3        | 2,1         |
| 2018 | 2,0  | 4,0                      | -3,8        | 1,8         |
| 2019 | 4,0  | 2,2                      | -0,7        | 2,4         |
| 2020 | -2,9 | -3,7                     | 6,0         | -5,2        |
| 2021 | 7,1  | -1,6                     | 1,6         | 7,1         |
| 2022 | 9,0  | 0,9                      | -3,4        | 11,5        |

Note. The table was calculated by the author on the basis of the data of DSK.

Table 2 calculates the impact of fixed capital investment, net exports and consumption on non-oil GDP growth in real terms based on the non-oil GDP deflator. In 2000-2022, the correlation coefficient between the growth of non-oil GDP and the growth of fixed capital investment costs is 0.69, the correlation coefficient between the growth of exports is 0.23, and the correlation coefficient between the growth of net exports is -0.08. The correlation coefficient between the growth of consumption was equal to 0.3. As can be seen, the impact of the change in fixed capital investment in the country on the growth of non-oil GDP is higher than the change in consumption. At the same time, the small correlation coefficient between the change in net export and the growth of non-oil GDP is due to the direct effect of the spending of oil revenues on the volume of investment and consumption expenses. Since investment and consumption in the country are the factors that form domestic demand, and oil revenues are formed in foreign currency, the part of this demand that is not met by domestic production affects net exports by being met by imports. Also, the growth of non-oil GDP is significantly dependent on spent oil revenues.

In Azerbaijan, in the period 2005-2022, the share of income in the added value of fixed capital in the non-extractive sector varied from 59.0 percent to 72.3 percent, and the share of net profit - from 46.9 percent to 63.4 percent. The increase in the share of net profit in the added value is, firstly, due to the high interest rate in the country, the high required rate of return, and secondly, as a result of high inflation, losses caused by a decrease in the real value of depreciation charges calculated based on the historical cost of previously commissioned fixed assets will increase net profit by compensating for these losses. Until 2013, the real volume of consumption of fixed capital in the non-extractive sectors of Azerbaijan was decreasing, and since 2014 it has begun to increase. Thus, the consumption of fixed assets in the country is equal to depreciation charges calculated based on their book value. Since the book value of new fixed assets is higher due to rising prices, the decline in fixed asset consumption indicates a decrease in the real value of fixed assets. This situation has become one of the factors that negatively affected the growth of non-oil GDP.





**Graph 4. Gross and net investment rates in the non-oil sector (as a percentage of non-oil GDP)**

The investment rate in the non-oil sector varied between 17.9 percent and 25.1 percent in 2015-2022, while the annual average was 21.2 percent, and the world average was 25.7 percent.<sup>26</sup> As can be seen, since 2015, the rate of investment in the non-oil sector has been lower than the world level, and the rate of net investment, which determines economic growth, has been small (graph 4). This low investment rate will have a dampening effect on the economic growth rate. Thus, since net investment leads to an increase in fixed capital in the corresponding amount, a 9.0 percent net investment norm can lead to an increase of approximately 2.6 percent of GDP in the non-oil sector according to the neoclassical approach.

According to calculations of marginal effective tax rate (METR) based on the Fullerton/King model, the METR is significantly lower if the investment is financed with debt than with private capital, and the reduction of the tax rate on interest income increases this difference. In this regard, the policy of increasing taxes can be focused on the

<sup>26</sup> [www.data.worldbank.org](http://www.data.worldbank.org)

taxation of interest income, but the introduction of such taxes will increase the sensitivity of METR to inflation. In addition, in the mentioned countries, they should develop financial markets to increase the ability of firms to use direct debt funds and to reduce the margin between loan rates and deposit rates. The effect of increasing the rate of tax depreciation on the reduction of the tax burden is higher than that of the reduction of the income tax. From this point of view, the tax depreciation rate can be preferred compared to the profit tax as a means of reducing the tax burden. It is also important to reduce the difference between economic depreciation deductions and tax depreciation deductions due to inflation.

**7. The main source of formation of investment resources in Azerbaijan in the medium term will be savings of the government sector. In particular, the level of household income limits their savings.**

A significant part of investment resources in Azerbaijan is formed as state savings. Also, the total share of the state's direct investments and capital transfers of fixed capital investment in the country in 2019-2022 varied between 54.5 percent and 76.4 percent. Since the amount of state savings mainly depends on oil revenues, the volume of oil and gas production and their world prices in the medium term will have a significant impact on the formation of investment resources in the country.

Due to the decrease in oil production in Azerbaijan and the decrease in the price of crude oil and natural gas in the world market, the oil GDP will decrease to 39.6 billion in 2024. AZN to 33.6 billion in 2028. it is predicted to decrease to manat. In this case, the annual oil revenues spent from the state budget in 2025-2028 will reach 18.2 billion in 2023. from AZN to 15.8 billion in 2028. it is expected to decrease to manat. In the medium term, the reduction of transfers from DNF to the state budget, income from its assets, as well as the increase in natural gas production will prevent the decrease in the value of DNF's assets. However, in 2028, the value of the net export of products and services in the oil and gas sector in US dollars will decrease by 1.7 times compared to 2023, and a 1 percent decrease in the real value of the export of crude oil and natural gas and their products will reduce

the real volume of national savings to 0.68 percent, then it can be concluded that the mentioned factors will reduce the national savings in the medium term.

A decrease in oil revenues spent in the country may increase the tax burden of the non-oil sector and negatively affect investment activity due to a decrease in domestic demand. Because oil revenues are the source of a part of the non-oil revenues of the state budget. Thus, taxes levied on spending oil revenues in the non-oil sector are included in the budget's non-oil revenues.

Households' propensity to save is expected to be low in the medium term. This situation is related to the low income and consumption volumes of the population. Thus, in 2017-2021, the per capita income of the population of Azerbaijan was close to the poverty line in the United States, and in 2022, it fell below the mentioned level.

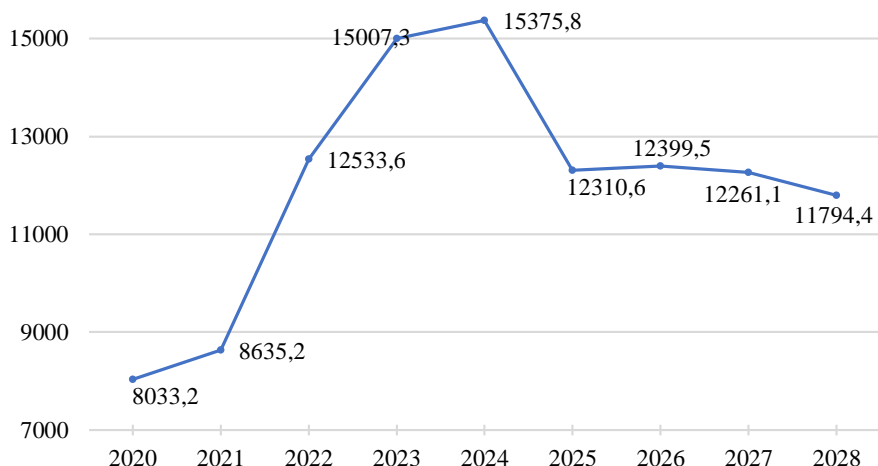
**8. The public investment policy in Azerbaijan is aimed at ensuring economic growth and improving the territorial and sectoral structure of the national economy. In this regard, to achieve these goals in the medium term, it is necessary to improve the investment environment, increase the investment rate in the non-oil sector, and support domestic demand.**

The average annual growth rate of GDP in Azerbaijan in 2010-2023 was 1.8 percent, which is lower than the world average. In this regard, one of the main goals will be to ensure the rate of economic growth in the country in the medium term. To achieve this, in the medium term, it is required to increase the ratio of investments in fixed capital to GDP in Azerbaijan.

According to budget forecasts in 2025-2028, the average annual investment rate will be 18.8 percent for the national economy, and 16.8 percent for the non-oil sector. Investments of this volume are not sufficient in terms of the 5.0 percent average annual growth rate of non-oil GDP in the mentioned period. In this regard, in order to increase the growth rate of non-oil GDP, it is required to increase the rate of investment in this area.

As can be seen from Graph 5, in the conditions of capital expenditures of the state budget in 2025-2028, the sources of financing for investment in fixed capital in the non-oil sector are uncertain. Also,

it is planned to reduce the ratio of capital expenditures of the state budget to investments in fixed capital from 70.4 percent in 2023 to 42.1 percent in 2028. In such circumstances, the importance of state financing of private sector investments under favorable conditions is increasing to ensure investment activity in the country.



**Graph 5. Dynamics of capital expenditures of the state budget (million man.)<sup>27</sup>**

Ensuring employment in Azerbaijan should be one of the main goals facing the economic policy. From this point of view, in the medium term, the country's entry into the sustainable development trajectory also depends on increasing the capital-labor ratio. However, other things being constant, an increase in the marginal product of capital due to technical progress leads to a decrease in wages. As the amount of capital in production increases, its marginal product decreases, and, accordingly, opportunities for wage growth arise. In this regard, increasing the capital-labor ratio is one of the important issues in terms of economic growth.

Since the size of the domestic market of a small country does not provide the minimum efficient size of production for most industrial

<sup>27</sup> [www.maliyye.gov.az](http://www.maliyye.gov.az)

products, the possibilities of developing the national economy due to import substitution are limited. At the same time, relatively poor countries tend to diversify their economies, and when their per capita incomes reach relatively high levels, incentives for specialization become a dominant economic force.<sup>28</sup> From this point of view, it is important to determine the possibilities of diversification of the national economy at the expense of import substitution in Azerbaijan. However, investment in import substitution of products that allow for significant economies of scale due to the increase in the volume of production leads to inefficient use of investment resources. Therefore, it is important to consider this factor in the selection of products for import substitution.

Currently, the share of imports in domestic use of agricultural products in Azerbaijan is approximately 10 percent. In particular, the processed part of agricultural products produced in the country is small. Such a situation leads to the dependence of agricultural production on the market of final consumer products and the increase of market risks in this area. In this regard, it is appropriate to implement measures to increase the processing of agricultural raw materials in Azerbaijan.

In the event of a decrease in oil revenues, the current level of development of the non-oil sector will not allow to ensure the current volume of imports in the future. In this regard, it is necessary to develop export-oriented non-oil fields along with the development of import substitution fields.

**9. The formation and effective use of investment resources in the country significantly depends on the implemented macroeconomic policy. The volume of state budget expenditures, the level of inflation and interest rates, and the exchange rate due to oil revenues affect the volume of investments, determining economic activity.**

Macroeconomic policy is one of the main factors affecting the formation and use of investment resources in the country. In particular, the growth rate of domestic demand, interest rate, inflation level, and

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<sup>28</sup> Kim, C.S., Mauer, D.C., Sherman, A.E. The determinants of corporate liquidity: Theory and evidence // Journal of Financial and Quantitative Analysis, 1998, 33(3), p. 84.

exchange rate affect economic activity, the level of income, thus the formation of national savings, the attraction of foreign investment, and the volume of investments.

Mobilizing part of the non-government savings to finance the budget deficit increases the real interest rate and reduces private investment. The process of replacing foreign public debt with domestic public debt is underway in Azerbaijan. In this regard, the negative impact of this on the investment activity of the private sector should be taken into account during the financing of the state budget deficit with the funds attracted from the domestic financial markets. The state's reduction of external debt and continuous increase of internal debt will create the need to attract additional funds from the financial markets in connection with the debt servicing costs.

In recent years, the main factor in spending the state's oil revenues has been the predicted price of oil in the state budget. However, it is suggested to take into account the Norwegian experience in the field of spending the state's oil revenues and to finance the structural deficit of the state budget at the expense of oil revenues. In order to limit the difference between the actual output and the potential output, it is appropriate to finance the non-oil structural deficit of the budget mainly through oil revenues.

Keeping inflation in the country within the defined framework is important in terms of reducing investment risks. In such a case, it is necessary to target the inflation level by the Central Bank. Currently, spending oil revenues obtained in US dollars through the state budget increases the supply of foreign currency in the country. The Central Bank's purchase-oriented intervention in the foreign exchange market to keep the nominal exchange rate of the national currency against the US dollar stable causes an increase in the supply of the manat and, as a result, inflation. In general, the Central Bank currently implements a policy that increases inflation to ensure the stability of the nominal exchange rate of the national currency, and by increasing the interest rate to reduce inflation, has a negative impact on economic activity. However, raising interest rates has not significantly curbed inflation. Thus, the level of inflation depends significantly on import prices. In this regard, it is appropriate to adjust the exchange rate of the national

currency to the US dollar by focusing on the real effective exchange rate for the non-oil sector in order to limit the inflation caused by imports.

In 2000-2022, the real interest rate and inflation level were variable in the country. In addition, the margin between the nominal borrowing rate and loan and deposit rates was significantly higher than the level in developed countries. The high interest rate in the country is one of the main factors limiting investment activity. This margin also shows the level of development of financial markets in the country and the need to take measures in this direction.

Calculations made without taking into account rent from natural resources in Azerbaijan show that the share of profit in added value in the national economy is high, and the share of labor payments is relatively low. In order to increase the share of wages in the structure of GDP in the medium term, it is necessary to reduce the cost of capital. Lowering the cost of capital creates opportunities for wage growth without raising prices.

**10. Stable and significant growth of private investment in the national economy occurs in a favorable institutional environment. In this area, policy is aimed at creating a predictable institutional environment, developing competition between business entities, and improving the mechanisms for supporting their development.**

The increasing frequency of institutional changes in the country, and continuous changes in laws and regulations create significant investment risks. In particular frequent changes in normative-legal acts related to labor, tax, customs, etc. reduce the efficiency of investment by increasing uncertainty and complicating the planning work of economic subjects. For example, the Tax Code was amended 27 times only during 2020-2022.<sup>29</sup> From this point of view, it is necessary to determine a sufficient period between the announcement and the entry into force of the mentioned changes for the economic subjects to adapt to the new changes.

Although part of the land plots in Azerbaijan belongs to the category of industrial, transport, communication, defense, and other designated lands, the low supply of electricity, gas, water, sewage, and

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<sup>29</sup> [www.e-qanun.az](http://www.e-qanun.az)

other networks for the creation of production and storage facilities in these areas limits the realization of investment opportunities. In recent years, the creation of industrial districts, technological parks, and agricultural parks in the country has reduced the mentioned restrictions. At the same time, increasing the opportunities to connect to electricity, water, gas, and other networks in the industrial, transport, communication, defense, and other designated lands intended for the placement of industrial enterprises and warehouses in the city and regional centers of Azerbaijan, the investment costs, the creation and construction of production workshops may lead to a reduction in the period of obtaining permits.

A small number of firms in the national economy leads to monopoly, and a large number leads to inefficiency. Thus, when the size of the domestic market is smaller than the minimum efficient scale of production, the activity of a firm in the market leads to a cheaper product offer. Therefore, it is necessary to determine the optimal number of firms in individual fields and implement measures to bring their existing number closer to this optimal size. Such a situation will also lead to the reduction of ineffective investment projects.

To effectively regulate markets in Azerbaijan, it is necessary to create an information system on markets. This system should include information on the level of local and import prices, prices of imported products in exporting countries and third countries, along with market volume and market share of individual subjects in different commodity and geographical boundaries of markets. The creation of such a system will facilitate the regulation of the markets, will enable the determination of more correctly regulated prices, and the implementation of anti-dumping, compensation and protection measures. Also, in order to improve the market regulation in Azerbaijan, it is appropriate to abolish the Tariff Council, to regulate the prices of natural monopolies and monopolistic firms by the State Agency for Antimonopoly and Consumer Market Control.

Ensuring investment activity is one of the important conditions for the improvement of corporate governance in the country to attract funds from the financial markets for additional investment in the growth of companies. In this regard, it is necessary to ensure



information transparency in joint-stock companies in the country, increase penalties for using insider information and violation of corporate governance principles, and implement measures to develop the infrastructure of the capital market.

The significant difference between the total investment in fixed capital in Azerbaijan in 2000-2023 and the value of capital funds put into use indicates that a part of the investment was not converted into capital funds. In order to reduce such cases, it is necessary to create the necessary potential for justifying investment projects.

There is a need to create potential for technical and economic justification of investment projects in the country. For this, it is proposed to create investment planning centers at universities or inter-university centers, as well as to increase the potential of field institutes at individual ministries and organizations.

The rules regarding the justification of investment projects should allow to assessment of the direct and indirect effects of investment projects on economic growth and employment of the population, and thereby make effective investment decisions. In our opinion, this rule should provide for the determination of the discount rate for making investment decisions based on the economic price of capital.

In the medium term, state investments in Azerbaijan will be financed mainly through oil revenues. In such a case, the economic discount rate can be considered equal to the internal rate of return on the final investment in the private sector. This approach will allow for determining the optimal financing ratios of public and private investments in the country due to oil revenues.

Evaluation of investment projects in terms of the interests of the society is carried out on the basis of economic prices, which take into account market distortions, including the deviation of actual (financial) prices of economic resources from market prices as a result of subsidies. Such an approach allows to determine the benefits obtained from investment from the point of view of society and to assess the distribution of these benefits among individual groups and sectors, especially the impact of investment projects included in the state investment program on economic growth.

Designing and disseminating the methodology for the preparation of private investment projects is important in terms of ensuring consistency in the justification of both public and private investment decisions. In particular, it is necessary to implement measures in order to increase the knowledge and skills of economic subjects to start business and business management.

**11. The connection of private investment in the national economy with the goals of economic development is ensured primarily through the mechanism of state support. Support for investment activities of the private sector due to oil revenues is also necessary from the point of view of ensuring the stability of economic growth and increasing the effectiveness of public investment.**

Since firms in small countries are more exposed to the influence of foreign competition, setting high taxes on consumption and low taxes on production in such countries will lead to an increase in the price competitiveness of local products and services. From this point of view, reducing the profit tax on the non-oil sector and increasing the value-added tax will have a positive effect on the efficiency of domestic investments without reducing the revenues of the budget. Also, while this change does not mainly affect the prices of local products, it will increase the price competitiveness of local producers by increasing the price of imported products. Since the tax burden of companies in Azerbaijan is sensitive to the profit tax, the reduction of the profit tax is one of the factors that increase the profitability of the investment.

When the inflation rate in Azerbaijan is below 0.32 percent, the discounted amount of tax depreciation deductions in the manufacturing industry exceeds the discounted amount of economic depreciation deductions. In this regard, taking into account that the inflation level in the country is targeted between 3.8-4.6 percent in 2025-2028, in order to bring the existing tax depreciation rates closer to the economic depreciation rates, in Article 114.3.2 of the Tax Code, the depreciation rate for machinery and equipment is increased from 20 percent to 25 percent. it is proposed to increase it to percent.

Producers of agricultural products in the country are exempt from other taxes except land tax. In addition, if the production and processing of agricultural products is organized in one enterprise, the tax is paid on the total profit, and if these productions are organized in separate enterprises, only on the profit in the processing enterprise. From this point of view, it is appropriate to create a mechanism for deducting profits from tax-exempt productions from the taxable base.

According to the Tax Code, natural persons pay 14 percent tax on dividends, and legal entities pay 20 percent tax on the amount equal to the increase in share or share prices in the authorized capital. To stimulate reinvestment in companies, it is appropriate to equate these tax rates with the tax rate applied to dividends.

Reducing import duties and VAT on intermediate and investment products used in the production of import-substituting products in the country and not produced locally is one of the important ways of stimulating their production. Although measures have been taken to reduce intermediate and investment products in recent years, it is advisable to continue them.

In order to increase investment activity, in order to reduce the interest rate in the country, it is proposed to place a part of the funds of the State National Fund in local banks that meet certain criteria, to increase their credit opportunities due to the purchase of shares of commercial banks that meet certain criteria at the expense of these funds, and to provide targeted concessional loans through development institutions.

The average annual profitability of DNF's investment portfolio was equal to 2.3 percent in 2012-2021, 3.0 percent in 2017-2021, and 1.6 percent in 2015-2022. In this regard, it is proposed to provide targeted loans for financing investment projects in the private sector in the country at a maximum rate of 6 percent, i.e., 2.5 percent to DNF, 0.5 percent to the Entrepreneurship Development Fund, and 3 percent to commercial banks.

To ensure the connection between the social insurance contributions paid by the employed population and their pension payments, the part that exceeds the pension amount is calculated based on the funds collected in the individual account to those who retire and

receive a higher pension compared to the funds collected in their personal accounts, is paid from the funds of the state budget, social insurance of the employed it is considered appropriate to collect the fees in DSMF. The mentioned proposal will enable the transformation of the pension capital, which is currently accumulated virtually, into real capital.

From 2023, measures are being taken to direct the free funds of both the DSMF and the Unemployment Insurance Fund to investment and to form a mechanism for using investment income. Such free funds can be invested in securities of the state and the Central Bank of the country, bonds guaranteed by the state guarantee, deposits in banks that meet certain requirements, and the total amount of investment deposited in banks cannot exceed 5 percent of the investment portfolio. To increase the financial capabilities of existing banks, it is appropriate to increase the share of the investment portfolio of both the DSMF and the Unemployment Insurance Fund placed in commercial banks to 10 percent.

## CONCLUSIONS

On the basis of a detailed study of the actual problems related to the formation and use of investment resources in Azerbaijan, the following conclusions were obtained and relevant **proposals** were put forward:

1. In the "Investment Activity" law adopted in Azerbaijan on June 22, 2022, the criterion of investment should be defined as obtaining economic and social benefit, including income, and not income. Thus, investment reflects the process of creating capital both for receiving income and for obtaining other benefits (in public administration, education, etc.).

2. Investment resources in an open economy are formed due to national savings, foreign investment, and capital transfers. National saving is directed to the growth of future consumption, it acts as the main source of increasing national wealth and financing investment. Its volume is affected by disposable income, economic growth rate, interest rate, level of development of financial markets, age structure of the population, uncertainties, taxes, and level of development of the social security system.

Attracting foreign direct investment has a positive effect on increasing productivity, technology transfer, and management skills. However, when a country's ability to absorb production, market, and management knowledge is low, the impact of attracting foreign investment on economic development is limited.

It is appropriate to save a part of the income from resources since oil and gas belong to exhaustible resources, the variability of income from resources, and the principles of sustainable development. The decision on the allocation of income from resources to consumption and savings in the country is determined by the social discount rate and the profitability of the investment, and the decision on the direction of savings to domestic and foreign investment is determined by the profitability norms of domestic and foreign investments. Changes in the volumes of consumption and investment ultimately lead to an imbalance in the distribution of income to consumption and investment. It is proposed to take into account the poverty threshold in the net preference

norm for the time used in the calculation of the social discount rate. Also, taking into account that the social discount rate of the poor group is higher than the rate of return on investment, it is considered appropriate to direct part of the income from resources in the country to consumption to reduce poverty.

3. Investment activity is directly affected by the price of capital, the ultimate efficiency of capital, and the possibility of ensuring the elimination of the difference between the optimal amount of capital and the actual amount. Determining the mentioned difference is due to the developed level of financial markets, the existence of competitive firms that can make efficient investment decisions, the absence of barriers to the cross-sectoral flow of capital, etc. depends on the conditions. Failure to develop such conditions at the necessary level in the country limits investment activity.

4. As a result of the successful oil strategy in Azerbaijan, the provision of the country's investment resources increased, and there were no financial restrictions related to investments from 2000-2022. However, the share of bank loans, shares, and corporate bonds in financing fixed capital investments is small. In particular, the primary markets of shares and bonds were not stable, and the volume of secondary markets was small in terms of ensuring their liquidity.

Oil revenues have had a significant impact on both non-oil GDP and national savings. Thus, a 1 percent change in real oil revenues spent through the state budget is approximately 0.4 percent of real non-oil GDP, and a 1 percent change in the real volume of crude oil and natural gas exports in manat is approximately 0.7 percent of the real amount of national savings. causes change.

The average savings rate in Azerbaijan in 2000-2022 and the mean square deviation of this indicator are significantly higher than the global indicator. The main part of the national savings was at the disposal of the state. In addition, the share of households in the national savings in 2006-2022 was either very small or negative. Such a situation is one of the factors limiting the development of financial markets in the country. Thus, one of the main functions of financial markets is to mobilize household savings and direct them to the financing of the national economy.

5. Currently, Azerbaijan lags behind developed countries significantly in terms of the capital-labor ratio. Also, the role of the private sector in the country's investment in fixed capital remains limited. This situation is related to the limited financial capabilities of the private sector and the lack of necessary knowledge and experience to invest in risky areas.

The growth of non-oil GDP in the country was significantly influenced by the investment costs, except for the mining industry, the share of consumption of fixed assets and net profit in added value was high.

The calculations show that the marginal effective tax rate in the case of debt financing of the investment in the country is significantly lower than that of private capital, and the reduction of the tax rate on interest income increases this difference. In addition, financial markets should be developed in the country to increase the ability of firms to use direct debt funds and to reduce the margin between loan interest and deposit interest. Also, as a means of reducing the tax burden, the tax depreciation rate can be preferred over the income tax.

6. In the medium term, national savings will decrease due to the decrease in oil revenues in Azerbaijan. This reduction will occur mainly at the expense of the public sector. At the same time, the income level of households shows that their propensity to save in the medium term will be relatively small.

Average annual oil revenues spent from the state budget in 2025-2028 will decrease significantly compared to 2023. In this case, the positive impact of these revenues on the development of the non-oil sector will gradually decrease.

According to budget forecasts for 2025-2028, the average annual investment rate for the national economy is predicted at 18.8 percent, and for the non-oil sector at 16.8 percent, which is because of the relatively high growth rate of non-oil GDP in the medium term. is not enough. Therefore, to ensure investment activity in the country, under the conditions of the reduction of capital expenditures of the state budget, it is appropriate to increase the financing of private sector investments by the state under preferential conditions.

When determining the possibilities of diversification of the national economy due to import substitution in Azerbaijan, the effect of the reduction of the minimum effective size of production on production costs should be taken into account. Thus, investments made in substitution of imports of products, which allow for significant economies of scale, are usually ineffective.

It is appropriate to implement measures to increase the processing of agricultural raw materials in Azerbaijan. The textile, clothing, and footwear industry is one of the import-substituting industries in this direction. In addition to the mentioned fields, investment can be made in the production of simple agricultural equipment, machinery, and tools.

In case of a decrease in oil revenues, the current level of development of the non-oil sector does not allow to ensure the current volume of imports in the future. In this regard, along with the development of import substitution areas, it is necessary to develop export-oriented non-oil areas.

In the medium term, the share of regions in total production is planned to increase to 42 percent in 2026. However, when the oil price rises, the share of Baku in total production increases, and when it falls, it decreases. Therefore, it is appropriate to define the goal of economic policy in this area as the growth of gross output in the regions.

6. When replacing foreign public debt with domestic public debt in Azerbaijan, the negative impact of this on the investment activity of the private sector should be taken into account. The state's reduction of its external debt and continuous increase of its internal debt will create the need to attract additional funds from the financial markets in connection with the costs of servicing this debt.

It is proposed to determine the structural deficit of the state budget as a criterion for spending the state's oil revenues. In order to limit the difference between the actual output and the potential output, it is appropriate to finance the non-oil structural deficit of the budget mainly from oil revenues.

In an open economy, an increase in the prices of imported products leads to an increase in the prices of domestic products in the domestic market. In this regard, it is proposed to adjust the nominal



exchange rate to prevent the transfer of inflation caused by imports to the national economy.

Although there were no significant fluctuations in the levels of the margin between the nominal borrowing rate and loan and deposit rates in the country in 2000-2022, this indicator is significantly higher than the level in developed countries. In this regard, lowering the interest rate in the country is proposed as one of the main ways to increase wages and increase investment activity without affecting inflation.

7. It is necessary to determine a sufficient period between the declaration and entry into force of the institutional changes in the country for economic subjects to adapt to the new changes.

Increasing the opportunities to connect to electricity, water, gas, and other networks in the industrial, transport, communication, defense, and other designated lands intended for the placement of industrial enterprises and warehouses in the city and regional centers of Azerbaijan can lead to a reduction in investment costs and the period of obtaining construction permits.

The return on fixed assets in Azerbaijan has been variable and relatively high, which arises when there are barriers to the cross-sectoral flow of capital and markets are not efficiently regulated. In this regard, the market regulation mechanism in the country needs to be improved. A small number of firms in the market leads to monopoly, and a large number leads to inefficiency. This regulatory mechanism should be directed to the optimal number of firms operating in the field. For this, it is required to create an information system on markets that includes information on local and import prices, prices of imported products in exporting countries and third countries, along with their volume and market share of individual subjects in different commodity and geographical boundaries of the markets, and so on.

Improving corporate governance in the country is one of the important conditions for increasing the role of financial markets in investment financing. In this regard, it is necessary to implement measures related to ensuring information transparency in joint-stock companies, increasing penalties for using insider information and

violating corporate governance principles, developing capital market infrastructure, etc.

In order to reduce the cases of non-transformation of capital investments into capital funds in Azerbaijan, in order to create the necessary potential for the justification of investment projects, it is proposed to create investment planning centers at universities or inter-university centers, as well as to increase the potential of field institutes at individual ministries and organizations.

For the justification of investment projects, it is appropriate to determine the discount rate based on the economic price of capital (economic discount rate), and to use economic prices.

8. Reducing the profit tax on the non-oil sector and increasing the value-added tax will have a positive effect on the efficiency of domestic investments without reducing budget revenues. Also, this change will increase the price competitiveness of domestic producers by increasing the price of imported products without affecting the prices of domestically produced products. In this regard, it is proposed to reduce the profit tax in the country from 20 percent to 18 percent and to increase the VAT from 18 percent to 19 percent.

Article 114.3.2 of the Tax Code proposes to increase the depreciation rate for machinery and equipment from 20 percent to 25 percent in order to bring the existing tax depreciation rates closer to the economic depreciation rates. Also, it is considered appropriate to create a mechanism for deducting profits from tax-exempt activities in the field of agriculture.

According to the Tax Code, 5 percent is paid for dividends, 14 percent for natural persons, and 20 percent for legal entities on the amount equal to the increase in share prices or shares in the authorized capital. Currently, if the share or share is owned for at least 3 years, then a 50 percent tax deduction is applied to the income obtained from its presentation. However, in order to stimulate reinvestment in firms, it is proposed to tax this income at the same rate as applied to dividends.

It is considered appropriate to continue measures aimed at reducing import duties and VAT applied to intermediate and investment products that are used in the production of import-substituting products in the country and are not locally produced.

In order to increase investment activity, in order to reduce the interest rate in the country, it is proposed to place a part of the funds of the State National Fund in local banks that meet certain criteria, to increase their credit opportunities due to the purchase of shares of commercial banks that meet certain criteria at the expense of these funds, and to provide targeted concessional loans through development institutions. . From this point of view, targeted loans can be given for the financing of investment projects in the private sector with a maximum of 6 percent, i.e. 2.5 percent to DNF, 0.5 percent to the Entrepreneurship Development Fund, and 3 percent to commercial banks.

9. Changes in the rules can be made to increase the participation of institutional investors (State Agency for Compulsory Medical Insurance, DSNF, Unemployment Insurance Fund) in the financing of the real sector. Also, it is proposed to create a guarantee mechanism for bonds issued by commercial organizations by the Mortgage and Guarantee Fund.

**The main provisions of the dissertation are reflected in the following scientific articles:**

1. Milli iqtisadiyyatda investisiya qərarlarının qəbulu mexanizmi və ona təsir edən amillər // “İqtisad elmləri: nəzəriyyə və praktika” jurnalı, 2010, №2, s. 180-188.

2. “İnvestisiya” və “kapital” anlayışlarının mahiyyəti: mikroiqtisadi və makroiqtisadi yanaşmalar // “Azərbaycanın vergi xəbərləri” jurnalı, 2011, №1, s. 69-84.

3. İnvestisiya resursları və onların formalaşması yolları // “İqtisad elmləri: nəzəriyyə və praktika” jurnalı, 2011, №1, s. 23-32.

4. Maliyyə bazarı və investisiya qoyuluşlarının maliyyələşdirilməsi: nəzəri və praktiki aspektləri // “İqtisad elmləri: nəzəriyyə və praktika” jurnalı, 2011, № 2, s. 47-56.

5. Azərbaycanda milli qənaətin formalaşması xüsusiyyətləri və onun həcminə təsir edən amillərin qiymətləndirilməsi // “İqtisad elmləri: nəzəriyyə və praktika” jurnalı, 2011, № 3, s. 61-72.

6. Azərbaycanca investisiya fəallığına təsir edən amillərin qiymətləndirilməsi // “İqtisad elmləri: nəzəriyyə və praktika” jurnalı, 2011, №4, s. 64-73.

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8. Makroiqtisadi siyasətin investisiya fəallığına təsiri: nəzəri və praktiki aspektlər // Azərbaycan Dövlət İqtisad Universitetinin Elmi Xəbərləri, 2013, İl 1, cild 1 yanvar-mart, s. 31-43.

9. “Kiçik” iqtisadiyyatda faiz dərəcəsinin investisiya fəaliyyətinə təsirinin qiymətləndirilməsi // Azərbaycan Dövlət İqtisad Universitetinin Elmi Xəbərləri, 2013, İl 1, cild 1, iyul-sentyabr, s. 7-18.

10. Azərbaycanca valyuta məzənnəsinin investisiya fəallığına təsirinin qiymətləndirilməsi // Azərbaycan Dövlət İqtisad Universitetinin Elmi Xəbərləri, 2014, İl 2, cild 2, aprel-iyun, s. 4-13.

11. Kənd təsərrüfatında dövlət dəstəyinin investisiya fəallığına təsirinin qiymətləndirilməsi // Az.KTIETİ, Elmi Əsərləri, 2017, №3, s. 59-66.

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