

Efficiency Indicators Use for Estimating of the Azerbaijan Agrarian Sector Investment Potential in the Modern Period

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Abstract: The article has been dedicated to the research of use efficiency indicators of the investment potential of the Azerbaijan agrarian sector in the modern period. Evaluation of investment operations, their economic efficiency indicators, as well as investment use efficiency in Azerbaijan Republic are assessed in the article. Together with study of agrarian investments use efficiency in the economy, the article draws attention to the concept of investment and its transformation to our economic lexicon and presents evaluation of factors affecting investment operations. Quantities indicators of domestic investment operations and those of foreign origin in the Azerbaijani economy in last seven years have also been analyzed in the article. It has specially been emphasized in the study that in last seven years, that is to say, within 2005-2012 total investment operations in the Azerbaijani economy increased by 3-4 times, whereas domestic investments and those of foreign origin increased by 6 and 2 times respectively. All these facts indicate growth in resource supply and efficiency of investment policy being carried out up to date. Special attention in the study has been paid to the fact of growth in investment operations directed to the agrarian sector, which is another indicator of investment use efficiency in the economy of the Azerbaijan Republic.

Key words: Investment • Agrarian Sector • Capital Investment • Investment Potential Of Agrarian Sector • Investment Effects

INTRODUCTION

One of the main specific features for the Azerbaijani economy today is the continuous growth of the demand for provision of steady and stable economic development, which, in turn, requires realization of different projects and programs. Of course, no activity in the mentioned sphere is possible without investment operations. Development tendency of changes in economy of any country significantly depends on substantiated decisions and their implementation [1-3]. Besides, one of the most important factors for steady and stable economic development in Azerbaijan is use efficiency of resources, particularly, financial and investment resources. In order to increase use efficiency of investment resources, especially in agriculture, there is a need for direction and diversification of resources, regular determination of efficiency criteria and development of growth tendencies in positive direction.

Another interesting fact is that material basis of social-economic development in agrarian sector of economy depends on investment potential. Characterization of qualitative and quantities indicators of investment potential also ensures strong financial order in the investment resources market. Logical result of usage of investment potential brings to creation of new main production funds and formation of a perspective innovative technological system, which enables high profit for provision of social and economic interests. Realization of investment potential plays an important role not only in formation of capital (creation of main production funds), but also in formation of specific resources as human resources, information and etc. It changes the social-economic basis of production and economic interests of production participants [4].

In general, limits, structure and efficiency of investment use allows defining current situations,

development perspectives and competitiveness of economic systems (which have different development levels) in national economies.

From this point of view, the article named “Use efficiency indicators of the investment potential of agrarian sector of Azerbaijan in the modern period” has been dedicated to the research of a very topical issue.

MATERIALS AND METHODS

In article various methods of research of processes and the phenomena in the field of the economic relations of agrarian sector are used. The integrated approach of research included set of methods of the scientific knowledge used both on theoretical and on empirical levels (conceptual modeling, synthesis and the analysis, tabular interpretation of empirical data). System and logical approaches to studying of tendencies of development of agrarian sector and its competitiveness and also monographic, settlement and constructive and economical and statistical methods of research were applied.

The main part. It would be purposeful to draw attention to the concept of investment and its transformation to our lexicon, before studying use efficiency of investment potential in the economy. It should be mentioned that the term investment was not in use in the 80s of the 20th century in the conditions of socialist reproduction of the Soviet period. Soviet economists claimed that this concept was distinctive for countries with capitalistic economy, private property and market economic relations. The alternative term in Soviet economic literature for investment was “capital investment”, which was viewed in two aspects: as movement of value in the process of reproduction of main production funds and as an economic category, which was related to movement of value in the system of economic relations and reflected advancing of cash assets in main funds until there were returned [5].

Beginning from late 80s and early 90s, the concept of investment entered the Azerbaijani language in economic literatures. Respectively, the issue of increasing the efficiency of investment operations as one of the main duties of the state and its related organizations began to gain high importance.

Investment activities and investment potential of the economy largely depends on correct investment decisions, which requires attention to many factors as below [6]:

- Investment resources are always limited;
- Investment has many types and there are many options of making investment decisions;
- Difference in prices of objects to be invested on;
- Risks related to investment decisions;
- Changes in the environment of investment activities, including domestic and foreign conditions [5].

Taking into consideration all these factors and using special methods, western scholars conducted analyses related to efficiency of investments. For example, in the 50s of the 20th century G. Markovich developed methodological principles of the management of financial tools portfolio. Later, scientific provisions of the portfolio theory were developed by U. Sharp. Sharp presented the techniques of the management of large-scale financial portfolios. In the 60s U. Sharp, J. Lintner and J. Mossy offered the model of capital assets price. In formation of theoretical ideas on financial issues of the modern period the main role belongs to studies of F. Modigliani and M. Muller [5].

It has to be noted that the main criteria for determination of efficiency are defined on the basis of the correlation of the unit of investment on material, labor and financial resources with production, services and significant growth in profits and national income. In this context, first of all, it is required to pay attention to concepts as efficiency and efficiency indicator. Economic efficiency refers to increase in production volume, labor productivity and national income and decrease in initial and current expenses. It should be noted that economic efficiency in investment operations is accompanied with definite results, particularly, with economic and social results. In diagram form, the mentioned idea can be expressed as below (that is to say, as the relation between the expenses for achievement of an economic result or resources used)

Economic Efficiency¹ Economic Result: At the same time, the criterion of assessment of public production efficiency is related to the highest point (the ultimate level) of the national income in correlation with expenses for production resources. The mentioned issue always drew attention of researchers both from theoretical and practical aspects. In the Soviet period observations related to assessment of investment efficiency began to emerge when the electrification plan was developed and executed. In the process of execution of the abovementioned plan all over the Soviets, economists

¹The mark of interaction

Table 1: Investment potential use efficiency

	Directly (operative)	Intermediary (tactical)	Delayed (strategic)
Finance	Optimization of debtor and creditor debts	Increasing of tax liabilities	Decreasing of demand and transfers
Economic	Increasing of GDP and enterprise profit	Decreasing of region prices	Increasing of investment attractiveness
Social	Increasing of peoples incomes	Growth of life level	Prosperity increasing
Ecologic	Decreasing of loss	Increasing of efficiency of use of region resources	Growth of resource

searched the most efficient and economical way of using financial and other resources. In years to come and during five-year plans, economic calculations related to investment for construction of hydroelectric power stations, metallurgy and other large-scale industrial enterprises were assessed namely from this point of view. At the same time, for many decades serious studies were conducted in scientific research centers on assessment of economic efficiency of investment operations. Such centers mainly used two types of calculation of investment on production and non-production sectors-1) typified and 2) fixed-date methods [7].

As a result of implementation of the typified method of investment, special instructions were developed by State Planning and Construction Committees of the USSR for determination of investment efficiency in different sectors of the economy as oil industry, weaving factories, metallurgy, agriculture and etc. The fixed-date method was mainly used for determination of investment and resource use efficiency in non-production sectors.

Beginning from the 90s, indicators of growth in national income are used as the main efficiency indicator of investment on economies of post-soviet countries, where economic effects are determined on the basis of results achieved in various economic spheres, enterprises, organizations and production unions.

However, there is an alternative idea which dictates that investment potential use efficiency displays itself by assessment of economic results and investment potential use effect is distinctive with being multidimensional [8]. The table below was prepared taking into account everything mentioned above.

As shown in the table, investment effects can be direct, indirect and deferred. Direct efficiency indicators of investment can be defined by growth indicators of GDP. Here, the main mechanism directly affecting economic results depends on use efficiency of existing potential.

At the same time, usefulness indicators of different elements of investment potential differ depending on economic content and indicators of these elements. Here, first of all, methods of profit gain, character of usefulness in time limits and methods of potential expanding can vary. According to methods of profit gain, permanent and one-time use can be derived from the

elements. This distinction particularly belongs to potential resource, its circle area and organizational-system part. Observations showed that one-time sale of element potential is often the most profitable. However, if not to account forecasts and prices with high accuracy, it may decrease efficiency of one-time profits. For example, it is more distinctive in regard to exploitation of non-renewable raw material resources. Work schedule here should be set such a way that doesn't weakens system potential. Besides, usefulness character of an element's potential within time limits differs, too. There are high limits of usefulness indicators of potential resources, after which resources lose their use effects. For instance, production funds gradually lose their use effects. In order to increase efficiency and to provide steady growth, it is required to achieve increase in usefulness of investment process within time limits. A special mechanism should be developed for achieving steady growth in usefulness of investment potential when this potential is used continuously. Potential renovation methods also depend on use methods if its parts. It should be noted on the basis of all mentioned above that some part of profits should be used in the form of reinvestment for renovation of elements and their increase to achieve restoration of overall potential and its increase. It ensures balanced and steady development opportunities of the economic system.

Besides, growth in GDP draws attention as the direct effect of increase in investment. However, situation in regard to indirect effects has some complexity. For example, as in planned economies, restoration of potential by using the tax-budget system has been a problematic matter and continues to be so. Otherwise, the problem of shortage in financial means can occur. One of the ways of solution for the problem is taking definite measures for decreasing investment operations from the budget, which is being realized today [8].

Assessment of investment potential use efficiency in Azerbaijan Republic: Azerbaijani Republic is among countries which draw attention with their investment attractiveness. In this country, 70% of all foreign origin investment operations are direct investment operations, which mean additional capital, new technologies,

Table 2: Investments to economy [9].

	2005	2009	2010	2011	2012
Investments by all sources (with foreign ones):					
mln.manats	6733,4	10475,0	14118,9	17048,8	20250,7
mln.dollars	7118,5	13033,5	17 591,4	21 589,0	25 777,3
Foreign investments:					
mln.manats	4628,5	4395,1	6619,7	6849,8	8 102,7
mln.dollars	4893,2	5468,6	8247,8	8673,9	10 314,0
Internal investments:					
mln.manats	2104,9	6 079,9	7499,2	10199,0	12 148,0
mln.dollars	2225,3	7564,9	9343,6	12915,1	15 463,3

Table 3: Investment operations in the agrarian sector of Azerbaijan (in million manats) [9].

Years	Total	Foreignn investments	Internal investments:
2005	4176	3350	826
2006	4297	3045	12915
2007	4591	2676	1915
2008	4249	2011	2238
2009	3225	1403	1822
2010	4276	1917	2359
2011	5370	2125	3245
2012	6040	2668	3372

improvement in management, decrease in unemployment and etc. Main reasons of investment attractiveness are the unique geographical location of Azerbaijan, favorable tax system and creation of appropriate business environment, stable social-economic situation and regulatory policy of the state.

To substantiate this conclusion by facts, we have prepared a table, which reflects quantitative indicators of domestic and foreign origin investment operations realized in Azerbaijan Republic in last 7 years.

As seen in the table, within 2005-2012 total investment operations in the Azerbaijani economy increased by 3-4 times, whereas domestic investments and those of foreign origin increased by 6 and 2 times respectively. Naturally, involvement of foreign origin investment is especially important and indicators in this sphere are quite high. However, it should be mentioned that rapid increase in investment at the expense of internal and other financial resources and higher percentage of domestic investment operations in comparison to those of foreign origin allows us to assume that national capital of Azerbaijan has strong position, resource supply for economic development of the country is ensured and economic policy carried out up to date is rather efficient.

Investment operations in the Republic, particularly those of foreign origin appeared to have positive tendency in 2013, too. Total amount of foreign origin investment operations in Azerbaijan was 3.78 billion Azerbaijani manats, which, in comparison to 2012 are more

by 31.18%. 87.4% (3301.4 million in manats) of all foreign origin investment invested in Azerbaijan between January-November belongs to investors from the UK, the USA, Japan, Turkey, the Czech Republic and France. Among them, specific weight of the UK in total size of foreign origin investment operations in Azerbaijan is 35.9%, that is to say, 1.354 billion Azerbaijani manats.

Investment of Norwegian origin includes 467.6 million manats (12,4% of specific weight), which is followed by the USA (454.64 million or 12%), Japan (346.06 million or 9.2%), the Czech Republic (258.11 million or 6.8%), Turkey (270.53 million or 7.2%), France (149.9 million or 3.9%), Russia and Iran (both 118.72 million or 3.1%).

The most large-scale investment invested by international financial organizations belongs to the World Bank (3.7% of special weight or 139.1 million manats). During January-November The Asian Development Bank allocated 42.3 million manats (1.1%) for realization of projects in Azerbaijan. Besides, amount of investment allocated between January-November by the Islamic Development Bank for investment in Azerbaijan was 9.27 million manats (0.3%). Another interesting fact is that amount of investment on Azerbaijani industry in 2005-2012 increased, too, which only confirms the abovementioned idea on use efficiency of investment resources in the Azerbaijani economy, where investment resources are used for creation of new work places, increasing production power, steady development of the economy with stable growth rate. All these show high use efficiency of investment operations in Azerbaijan.

One of the important ways to develop agriculture in any country is improvement of necessary technical and machinery equipment in this sphere. It should be mentioned that during 9 years from 1990 to 1999, number of agricultural tractors decreased by 1.4 times, while in combine harvesters, ploughs and mowers this number was 1.3, 2 and 2.5, respectively. Together with quantitative decrease, there was a serious decrease in quality parameters, too.

After the order of the president of Azerbaijan Republic (23rd of October, 2004) on “Additional Measures for Expansion of Leasing in the Agrarian Sector”, purpose of which was improvement of material-technical basis of agriculture, “Agro-leasing” Open Joint-Stock Company was found and 100% of the control package of shares in the Company was state-owned. During 7 years from 2004 to 2011, financial means in the amount of 317.6 million manats were allocated to “Agro-leasing” JSC. The Company provides producers of agricultural production with technical equipment, technological devices, spare parts, agro-chemical materials, anti-parasite drugs and agro-services. Agro-leasing JSC has 5 interregional provision bases in regions, agro-service branches in 55 regions and their 110 mechanized groups and the Central Provision Base in Baku city. During 5 years from 2005 to 2010, The Company has purchased on the account of budget allocations 2494 tractors, 990 combine grain harvesters, 45717 agricultural machinery for different purposes, 40 technological equipment units of different destinations (a forage plant, cooling cameras, a milk factory), 254.8 thousand tons of fertilizers, 294.3 thousand tons of anti-parasite drugs and 7189 tons of

wheat for sowing. Currently, agricultural technical means and technical equipment purchased by the Company on the account of budget allocations are offered to legal or physical entities for leasing for 10 years under the term of advance payment of 20% or are sold by leasing. In accordance with the decision of the Council of Ministers related to the Presidential Order on “State Support to Producers of Agricultural Products” (23rd of January, 2003), amount of state financial support for each hectare of wheat plantation is defined as 40 manats. In addition, wheat of high reproduction imported for state and private seed-farms, which operate on the account of state allocations is subject to discount at 50%, while wheat producers buy mineral fertilizers even at 70% state discount. Amount of fertilizers to be sold at discount is defined as 300 kg per hectare. Besides, for the purpose of increasing productivity of farm animals, improvement of existing animal sorts and increasing the number of breeding animals, imported pedigree animals are sold at 50% discount by leasing under the term of 50% payment in advance and payment of the rest of amount in 3 years. Such measures have significantly influenced the increase in efficiency of investment in agriculture.

Risk level is important for efficiency of investment in agriculture. In spheres with high risks, level of required income is also high. If expected or real efficiency level in any sphere is lower than required, no investment is realized. From this point of view, application of the mechanism of risk protection in agriculture is of high importance. On the 18th of 2002, the Law on “Stimulation of Insurance in Agriculture” was adopted in Azerbaijan Republic, which now is the main source for determination

Table 4: Sturucture of total agricultural production (in real prices, in accordance with sum total, %).

Years	Total	Including		Total	Including	
		Plant products	Livestock products		Plant products	Livestock products
		Agricultural enterprises and other organizations			Private entrepreneurs, peasants and households	
2000	2,3	2,9	1,4	97,7	97,1	98,6
2001	1,9	2,1	1,7	98,1	97,9	98,3
2002	1,8	1,4	2,4	98,2	98,6	97,6
2003	3,0	1,3	5,6	97,0	98,7	94,4
2004	4,3	1,5	8,3	95,7	98,5	91,7
2005	4,0	1,4	7,4	96,0	98,6	92,6
2006	3,2	1,4	5,6	96,8	98,6	94,4
2007	4,3	1,3	9,3	95,7	98,7	90,7
2008	5,6	2,0	11,8	94,4	98,0	88,2
2009	6,0	3,3	9,4	94,0	96,7	90,6
2010	5,0	3,0	7,1	95,0	97,0	92,9
2011	5,2	3,5	7,0	94,8	96,5	93,0

Source: [9]

of legal and financial bases of stimulation of property insurance for producers of agricultural products and regulation of relations between participants of insurance. The purpose of the law is stimulation of development of insurance in agriculture through participation of the state in natural disaster insurance of properties of producers of agricultural products and strengthening economic bases of the guaranty given to owners of insurance for compensation for damage. Objects of property insurance in agriculture include products of agricultural plants, farm animals, poultry, rabbits, fur-bearing wild animals, bee families, as well as agricultural buildings, facilities, appliances, machineries, vehicles and other properties (excluding low-value, quickly staling things and products of natural meadows). In 2008, it was defined that 50% of insurance payment would be paid by the state. In addition, allocations have been made from the state budget for insurance of property in the agrarian sector. However, these allocations have not been used completely. For example, amount of the budget allocation for the mentioned purpose in 2006 was 172.2 thousand manats and 400 thousand and 900 thousand manats in 2008 and 2010, respectively, which was not used completely. We consider that it is connected with lack of organization of insurance of agricultural products and underestimation of this type of insurance by producers of agricultural products.

As decisions are made on division of resources in the process of investment, taxes are among the important factors that affect such decisions. Level of taxes influences cost of capital, amount of investment costs and the level of incomes and costs arisen from operation of an entity created as a result of investment. So, changing the level and structure of taxes, it is possible to influence investment activeness in any country.

Despite of increase in activeness in the sphere of agriculture in recent years, small size of farms restricts the increase of the technical-economic level in them.

As seen from Table 4, during the period from 2000 to 2011, percentage of products produced by private entrepreneurs, households and peasants (which usually had plots of land a in size equal to 2-3 hectares) in plant growing was approximately 97%. Small size of farms in this sphere restricts the efficiency of stimulations directed to increase in technical and economic level of production and development of sales. Currently, lack of formation of land market in the country restricts the opportunity of creation of comparatively large and medium size farms. Small size of farms creates additional difficulties for their establishment of effective business relationships with processing industry.

CONCLUSION

Azerbaijani Republic is among countries which draw attention with their investment attractiveness. In this country, 70% of all foreign origin investment operations are direct investment operations, which mean additional capital, new technologies, improvement in management, decrease in unemployment and etc. Main reasons of investment attractiveness are the unique geographical location of Azerbaijan, favorable tax system and creation of appropriate business environment, stable social-economic situation and regulatory policy of the state. Analyses show that from one hand, annual growth dynamics of domestic and foreign origin investment operations in the country? And especially in agrarian sector is quite steady. From the other hand, domestic investment operations significantly increase regularly. All these can be assessed as the main indicator of high use efficiency of investment potential of agrarian sector of Azerbaijan.

REFERENCES

1. Chernyakov, B.A., 2002. American farming: XXI century, Moscow, Xudojestvennaya literatura press.
2. Economic performance of small ruminant production in a protected area: a case study from Tell Ar-Rumman, a Mediterranean ecosystem in Jordan. 2013. *Agricultural and Food Economics*, 1(8): 132-141.
3. Statistic Indicators of Azerbaijan, 2008, p. 453; 2011, p. 513; 2012, p. 493.
4. Neshitoy, A.S., 2007. Investments. Moscow, Dashkov and Co press.
5. Modigliani, F. and M. Miller, 1963. "Corporate income taxes and the cost of capital: a correction". *American Economic Review*, 53(3): 433-443.
6. Porter Michael, E., 1990. *The Competitive Advantage of Nations*, New-York, Free Press.
7. Belomestnov, V.G., 2005. Management of investment processes. Ulan-Ude, ESSUTM press.
8. Evans, A., 2008. *Rising Food Prices: Drivers and implications for Development*. Briefing Paper, Chatham House, London.
9. <http://www.stat.gov.az/>