DOI: https://doi.org/10.30525/978-9934-26-220-3-19

Oleksandr Yermakov

Doctor of Economics, Professor,

Department of Economics

National University of Life and Environmental Sciences of Ukraine

Hanna Kalashnykova

Postgraduate student of the Department of Economics National University of Life and Environmental Sciences of Ukraine

AGRICULTURAL SECTOR OF UKRAINE: DEVELOPMENT, CONDITIONS OF FUNCTIONING

Summary

The modern paradigm of investment support of branches of national economy is presented, according to which features of investment activity of agrarian sector are investigated. It is proved that a significant factor in the efficiency of the agricultural sector of any country is foreign direct investment. Among the important reasons for the decline in investment in the agricultural sector are unfavorable agricultural policies for producers, reduced budget support for producers, narrowing investment opportunities, unacceptable investment risks for potential investors, and so on. The prerequisites for assessing the effectiveness of investment support of the agricultural sector, which involve the use of regression analysis methods to extrapolate the trends of relevant indicators, which determine the development trends of the agricultural sector of Ukraine.

Introduction

Ukraine has all the necessary conditions to provide the population with quality and affordable food. Some of the best fertile lands in the world, favorable climate, rich historical experience of agricultural production and working capacity of the population allow to fully realize the powerful potential of the agricultural complex. The agricultural sector makes a significant contribution to the country's GDP, foreign exchange earnings from foreign trade operations, provides the domestic market with a wide range of food products at a very acceptable level.

Positive dynamics in the agricultural sector of the economy was achieved through the intensification of state policy, which, in addition to implementing domestic legislation in accordance with European and international standards, provided by the Association Agreement between Ukraine and the EU, aimed at creating organizational, legal and economic conditions. improving land relations management processes. The most significant achievements were the following: sanitary and phytosanitary measures in agriculture and food safety

control systems are consistently brought to European requirements and practices; state policy for the development of farms and agricultural cooperation is being modernized; land relations management processes are being improved; the practical implementation of the Concept of Rural Development has been started. At the same time, the current state of the agricultural sector demonstrates the exhaustion of the reserves of the current model of its development, based on economies of scale and extensive methods of resource use. Its functioning and development are constrained by the following restrictions: extension of the moratorium on the market circulation of agricultural land; lack of strategic vision and concrete actions of the authorities to overcome the crisis in the livestock industry; non-recognition of personal peasant farms of the population as economic entities makes it impossible to identify them as producers of marketable products; preservation of ecologically depleting agricultural land use, which leads to deterioration of soil cover.

Part 1. Modern paradigm of investment support of branches of national economy

Examining investment security, first of all, it is necessary to reveal the essence of the concept of «investment», which is the basis for understanding the processes and components of investment in economic systems in modern economic systems at different levels of their functioning (micro- (enterprises); meso- (regions and industries); macro- (country, international and world economy)). In modern economic transformations in Ukraine, the term «investment» is used at both macro and microeconomic levels [3, p. 29].

It is necessary to identify the advantages and disadvantages of the essence of these concepts «investment activity», in particular, the advantages include: subordination of investment theory, focus on reforming the investment management system, the relationship with innovation, takes into account all stages of the investment life cycle. and connection with management, the concept is considered from the standpoint of organizing the investment process; substantiates the need for management and connection with the development of the economy at the macro-; meso-; micro-levels, takes into account the complex nature of the process, reveals the types of investment activities, etc.

Among the features of the investment activity of the enterprise should be noted the following: investment in the development of the enterprise is the most important form of ensuring the growth of the efficiency of its management; forms and methods of investment activity of the enterprise are less dependent on the sectoral characteristics of the enterprise compared to production activities; the dynamics of investment activity is characterized by a certain unevenness in certain periods of time; investment activity forms a separate independent type of cash receipts of the enterprise; from the moment of realization of investments to the moment of receiving added value from their investment there is a considerable gap in time; investment activity is

characterized by significant risks, which are explained by the factor of uncertainty of the external environment [9, p. 156].

The priority goal of investment activities is to satisfy the interests of participants to the fullest extent, so the qualitative characteristics of investment efficiency is to obtain the highest level of efficiency. From the point of view of quantitative certainty, the essence of investment efficiency is manifested through the action of a specific law of increasing production efficiency, which is based on certain socioeconomic conditions, during the change of which its effect is modified or terminated. According to this law, the maximum management result must be achieved with the minimum amount of resources used [4, p. 85].

The main goal in the investment activities of agricultural enterprises is to create a favorable investment climate. It will provide an opportunity to ensure the favorable development of the agricultural sector. In this regard, investment policy must take into account:

- first, the development of a system of measures to create a favorable investment climate:
- secondly, to attract investment resources, which in the future will be aimed at implementing the development strategy of the state, the region thirdly, to form a mechanism for managing investment flows [14].

The main purpose of investment support is to create competitive investment objects on a new innovative and technological basis to ensure the development of the agricultural sector of the economy, strengthening its position in the domestic market and entering the foreign market; development of rural social infrastructure; introduction of ecological and food security of the state. This determines the features of investing innovations and provides an opportunity to scientifically substantiate the directions of innovation, structure and sources of investment, helps to increase the competitiveness of production and products [8, p. 24].

Overcoming the investment crisis is impossible on the basis of traditional approaches to the management and organization of the agricultural economy. New methodological solutions are needed that absorb the positive experience of the socialist and capitalist economies and at the same time are qualitatively different from previous practice. The possibilities of applying systems theory to study social processes are far from exhausted, so synergy and systemology have opened up new possibilities for finding universal principles of self-organization and evolution of complex systems [2].

The modern agrarian economy and its investment activities have proved to be extremely unstable. They are characterized by both local and global risks. Transformation of the economy, its constant reform cause enormous damage to production, the vital interests of the majority of the population. Synergistic vision allows a new look at the problems of organization and management of economic processes in rural areas, to develop a new concept of social management, which will enter the mode of innovative self-organization, generating new institutional structures capable of higher development. As noted by V. Yurchyshyn should focus on the fact that the socio-economic

reorientation of the agricultural sector will be a stimulating factor for more efficient development of all aggregate industries [19, p. 16].

The synergistic effect of investment activities can be understood as an additional component of the effect, which will result from the coordinated interaction of all investment projects implemented in this period and characterized by multilateral assessment of additional economic, financial and investment benefits [6, p. 147].

It should be noted that the synergistic effect is manifested not only in the implementation of a particular investment project, but also in the interaction of different investment projects. It is possible to adjust for additional synergy effect from the interaction of investment projects in selected combinations [5, p. 126].

A new paradigm of investment support in the agricultural sector is presented in Figure 1.

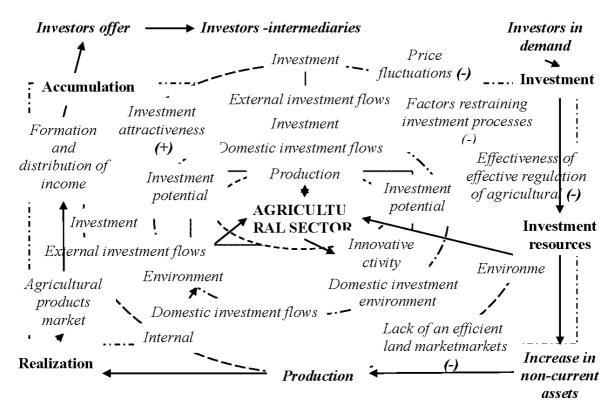


Figure 1. Paradigm of investment support in the agricultural sector *Source: author's development*

Thus, it is determined that the prerequisite for further sustainable development of the agricultural sector is the application of a systematic approach to investment processes based on a combination of different structural components that interact with each other and dictated by the paradigm according to which investment security is considered a complex system.

The main components of investment support are production, financial and economic resources and resources of investment activity; natural and labor

resources, which together form the investment potential of the agricultural enterprise, in particular, determine the economic, environmental and social components of its structure, each of which, in turn, is a system of varying complexity and performs its functions within the overall system.

Part 2. Agricultural sector: operating conditions

Investment is an important component of economic growth and development of both individual industries and the country as a whole. Ensuring positive investment dynamics in the agricultural sector is a necessary condition for achieving food and national security of the country and economic growth and development in the future. Ukraine's agriculture has significant competitive advantages in world markets, strong but not fully exploited potential, it is one of the most attractive sectors of the economy for investors, so it has all the prerequisites for further development. At the same time, in modern conditions, against the background of falling industrial production and due to export orientation, agriculture plays the role of a kind of catalyst for economic growth. Therefore, it is important to create a favorable environment and conditions for the development of the national agricultural sector through the expansion of its investment potential, stimulating investment activities of agricultural producers and ensuring positive dynamics of capital investment [7, p. 27].

Directions of research of tendencies of development and efficiency of investment maintenance of agrarian sphere are presented on Figure 2.

However, according to one of the indicators that reflects the degree of integration of the country into the world economy, the development of its foreign economic relations and the desire to create an open, export-oriented economic model – accumulated foreign investment, Ukraine is far behind the vast majority of countries with transformational economies (Table 1).

During 2017–2021, foreign direct investment (FDI) in Ukraine's economy came from about 130 countries, the bulk of revenues for many years accounted for a small number of countries due to slight geographical diversification of FDI exporting countries to Ukraine.

Table 1
Structure of foreign direct investment in Ukraine 2017–2021

| Years | FDI in Ukraine, million dollars USA | Equity instruments, USD million USA | Debt instruments, million dollars USA | Equity instruments, % of FDI | Debt instruments, % of FDI |
|-------|--|-------------------------------------|---------------------------------------|------------------------------|----------------------------|
| 2017 | 47765 | 36310 | 11455 | 76,02 | 23,98 |
| 2018 | 46984 | 35391 | 11503 | 75,33 | 24,48 |
| 2019 | 54210 | 41600 | 12547 | 76,74 | 23,15 |
| 2020 | 52091 | 37600 | 14491 | 72,18 | 27,82 |
| 2021 | 62131 | 44181 | 17950 | 71,11 | 28,89 |

Source: [11]

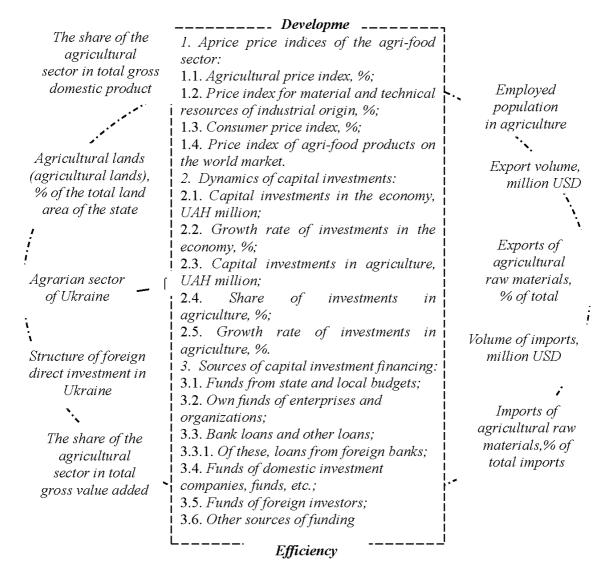


Figure 2. Directions of research of tendencies of development and efficiency of investment maintenance of agrarian sphere

Source: author's development

Foreign direct investment in Ukraine is formed by two groups of capital: those directly owned by foreign residents and those controlled by foreign companies resident in Ukraine (Ukrainian capital previously exported, usually to offshore jurisdiction – round-tripping FDI). A survey of countries exporting foreign direct investment to Ukraine's economy shows a low share of foreign direct investment from developed countries, while the number of offshore zones is quite significant.

Thus, in 2017, the total amount of accumulated foreign direct investment from such territories reached \$ 13,045.7 million, which is more than 33% of total foreign direct investment, respectively, thus offshore investments displace the capital of developed countries from the Ukrainian economy and provide

only quantitative indicators of the growth of foreign direct investment in Ukraine, not qualitative.

High interest rates on bank loans, low confidence in most Ukrainian agroindustrial companies in foreign stock markets, underdeveloped national stock market, leasing and the practical absence of foreign investors also led to stagnation in investment in Ukraine's agricultural sector (Table 2).

Table 2

The share of the agricultural sector in the economy of Ukraine, %

| Indoves | Years | | | | | | |
|--|--------|--------|--------|--------|---------|--|--|
| Indexes | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Agricultural lands (agricultural lands), % of the total land area of the state | 71,66 | 71,65 | 71,67 | 71,65 | 71,65 | | |
| Share of agricultural sector in total gross domestic product (%) | 10,82 | 10,85 | 9,70 | 9,85 | 10,63 | | |
| Share of agricultural sector in total gross value added (in actual prices) | 303949 | 361173 | 356795 | 393077 | 580519 | | |
| Employed population in agriculture | 2860,7 | 2937,6 | 3010,4 | 2721,2 | 1446,30 | | |
| Export volume, billion USD | 43,26 | 47,34 | 50,05 | 49,32 | 68,24 | | |
| Export of agricultural raw materials, % of total merchandise exports | 41,15 | 39,29 | 44,1 | 39,8 | 41,0 | | |
| Volume of imports, billion USD | 49,61 | 57,19 | 60,8 | 54,04 | 73,3 | | |
| Imports of agricultural raw materials, % of total merchandise imports | 9,47 | 9,61 | 9,38 | 10,5 | 11,0 | | |
| Coverage ratio of imports by exports | 0,87 | 0,83 | 0,82 | 0,91 | 0,93 | | |

Source: author's calculations

The share of the agricultural sector in the gross domestic product reached the maximum level in 2018 and amounted to 10.85%, the minimum in 2019 – 9.7%, so it varies at the level of 9-11%, such fluctuations are evidence of the need to search reserves for the development of economic activity in the agricultural sector.

In addition, foreign direct investment (FDI) is a significant factor in the efficiency of any country's agricultural sector. The introduction of foreign investment mainly has positive consequences, for example: [17] – Investment is a constant stable source of money. Their constant inflow makes it possible to ensure a continuous inflow of capital into the economy, which leads to an increase in its production capacity, increase the level of competitiveness and quality of Ukrainian goods and services. – Investing entails the transfer of technology, management skills, exchange of experience. This increases the level of technological development of our state, which requires highly qualified workers. Thus, investment stimulates the growth of demand for labor and increases the welfare of the population.

Part 3. Prerequisites for assessing the effectiveness of investment support of the agricultural sector

Agriculture is one of the priorities, strategically important areas of national economy development. However, investment in the industry is low and the investment climate is unattractive to investors. In the system of measures for the development of the agricultural sector, the most important thing is to increase investment. Without investment savings and appropriate production and technical resources, positive changes are impossible [16]. Note that there is a correlation between investment in the agricultural sector and gross domestic product (Figure 3).

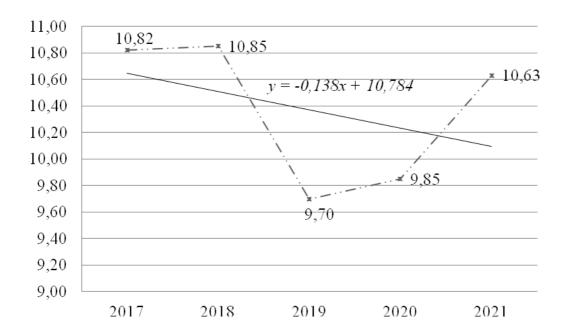


Figure 3. The share of the agricultural sector in total GDP (%)

Source: built by the author on the basis of data from the State Statistics Service of Ukraine [1]

The function of the trend of the share of the agricultural sector in the total GDP of Ukraine in 2017-2021 is as follows: y = -0.138x + 10.784, where y is the share of the agricultural sector in the total gross domestic product in the corresponding year,%; x- number of the year in the period, the regression coefficient b = -0.138 shows the average change in with increasing or decreasing the value of the factor x per unit of measurement, in our case it should be expected that further deepening of negative investment processes in the agricultural sector general decline in the national economy.

Price indices of agri-food products of the agricultural sector of Ukraine are presented in table 3.

During 2017–2021, there were fluctuations in price indices for agricultural products, which were generally in line with global trends. At the same time, price

dynamics in the sector sometimes exceeded the general indicator of the consumer price index, but, as a rule, lagged behind the dynamics of prices in industry.

Table 3 **Price indices of agri-food products of the agricultural sector of Ukraine**

| Indicator | Years | | | | | |
|--|--------|-------|-------|-------|-------|--|
| Indicator | 2017 | 2018 | 2019 | 2020 | 2021 | |
| Agricultural price index, % | 111,8 | 104,4 | 86,6 | 153,6 | 116,7 | |
| Price index for material and technical resources of industrial origin, % | 124,60 | 115,9 | 98,40 | 93,7 | 149,1 | |
| Consumer price index, % | 113,7 | 109,8 | 104,1 | 105,0 | 110,0 | |
| Price index of agri-food products on the world market | 98,0 | 95,9 | 95,1 | 98,1 | 125,7 | |

Source [1; 13; 20]

Thus, the simultaneous growth of food prices on world markets and in Ukraine has prompted the resumption of discussions on the ability of our country to ensure the saturation of the domestic market of agricultural products through the use of its own agricultural potential. Dynamics of capital investments in the economy of Ukraine are presented in table 4.

The sharp decline in investment in 2020 will have a negative impact on agricultural output in the short term, given the shortage of crops and the need to meet export commitments in 2021 may disrupt the self-sufficiency of the domestic market for certain foods, feeds and some other products.

Based on the results described above, it is seen that the main trends in the agricultural sector of Ukraine are characterized by an increase in power function, however, all constructed regression functions are adequate, as the actual values of coefficients of determination are higher than tabular.

Table 4 **Dynamics of capital investments in the economy of Ukraine, 2017–2021**

| Indicator | Years | | | | | | |
|---|----------|----------|---------|---------|---------|--|--|
| Indicator | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Capital investments in the economy, UAH million | 448461,5 | 578726,4 | 623980 | 419800 | 528802 | | |
| Growth rate of investments in the economy, % | X | 129,0 | 107,80 | 67,28 | 125,97 | | |
| Capital investments in agriculture, UAH million | 63400,7 | 65059,4 | 58555,4 | 50189,4 | 49127,4 | | |
| Share of investments in agriculture, % | 14,14 | 11,24 | 9,38 | 11,95 | 9,29 | | |
| Growth rate of investments in agriculture, % | X | 102,60 | 90,00 | 85,71 | 97,88 | | |

Source [15]

The slowdown in agricultural investment activity is explained by the unstable economic and political situation in the country, as well as the fact that working conditions are deteriorating every year, increasing risks for investors in terms of instability and unprofitability of the industry (Figure 4).

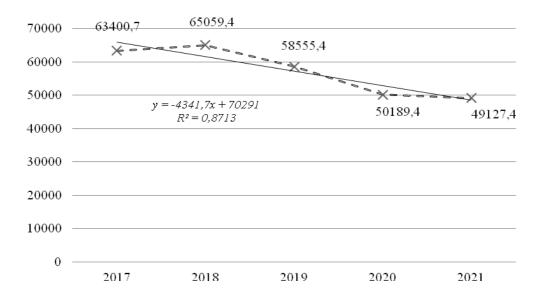


Figure 4. Dynamics of capital investments in agriculture in Ukraine for 2017–2021, UAH million

Source: built by the author on the basis of data from the State Statistics Service of Ukraine [1]

The trend function determines the trend of change in the time series, the trend function of capital investment in agriculture in Ukraine in 2017-2021 is as follows: y = -4341.7x + 70291, with the approximation coefficient is $R^2 = 0.8713$, where y - volume of capital investments in the corresponding year, UAH million; x is the number of the year in the period, therefore, the regression coefficient b = -4341.66 shows the average change in the performance indicator (in units of y) with increasing or decreasing the value of the factor x per unit of measurement, in our case with increasing 1 unit y decreases a total of -4341.66; the coefficient a = 70291.44 formally shows the projected level of y, but if x = 0 is close to the sample values, therefore, there is an increase in the deviation of investment in agriculture, which is a consequence of the overall decline in investment in agricultural production and insufficient amounts of compensation.

Among the important reasons for the decline in investment in the agricultural sector are unfavorable agricultural policies for producers, reduction of budget support for producers, narrowing investment opportunities, unacceptable investment risks for potential investors, and so on.

The structure of capital investment in the agricultural sector by source of funding is presented in table 5.

Direct state financial support for economic entities in the agricultural sector has more than halved and averaged 0.30%. Given the limited own financial resources and investment crisis in Ukraine, foreign capital in the form of direct and portfolio investment is one of the sources of funding, which allows to cover the temporary needs of domestic agricultural producers in finance [12, p. 28].

Own funds of enterprises and organizations remain the main source of financing capital investments in the economy of Ukraine and its agricultural sector in 2020: their share is 90.65%, while in the national economy – 66.93%. In the studied sector, the share of this source in investment financing has not changed compared to the previous year (decreased by 0.18 percentage points), and in the national economy – increased from 65.43% in 2019 to 66.53% or at 1.1 pp). In second place among the sources of financing capital investments in the agricultural sector in 2020 are bank loans (and other loans) – 8.61%, which is more than in 2019 by 0.1 percentage points. (6.64% of the national economy is financed by bank loans, which is 4.13 percentage points less than in the previous year). The shares of other sources of investment in the agricultural sector are insignificant: state budget funds – 0.28%, local budget funds – 0.09%, loans from foreign banks - 0.3%, funds of domestic investment companies, funds – 0.06%. In the national economy, these shares are respectively: 8.70%, 10.38%, 2.88%, 1.01%, as well as: funds of foreign investors – 0.41%, other sources of financing – 1.42% [18, p. 106].

Further determination of the prerequisites for assessing the effectiveness of investment security of the agricultural sector involves the use of regression analysis methods to extrapolate the trends of relevant indicators that determine the development trends of the agricultural sector of Ukraine (Table 6).

Thus, the development of the agricultural sector is characterized by an increase in the power function, in addition, all constructed regression functions are adequate, because the actual values of the coefficients of determination are higher than the table. The obtained dependencies make it possible to predict the main trends in the development of the agricultural sector, and is a prerequisite for assessing the effectiveness of investment support of the agricultural sector of Ukraine.

Conclusions

It is determined that the prerequisite for further sustainable development of the agricultural sector is the application of a systematic approach to investment processes based on a combination of different structural components that interact with each other and dictated by the paradigm according to which investment security is considered a complex developing system.

The simultaneous growth of food prices on world markets and in Ukraine has prompted the resumption of discussions on the ability of our country to

ensure the saturation of the domestic market of agricultural products through the use of its own agricultural potential.

Table 5
Structure of capital investments of the agricultural sector
by sources of financing, 2017–2021, % of the total

| Samuel at marking, 20 | | Рік | | | | | |
|---|------------|-----------|-------|-------|-------|--|--|
| Source structure | 2017 | 2018 | 2019 | 2020 | 2021 | | |
| Agriculture, forest | ry and fi | sheries | | | | | |
| Used capital investment, total | 100 | 100 | 100 | 100 | 100 | | |
| state budget funds | 0,27 | 0,18 | 0,42 | 0,28 | 0,31 | | |
| funds from local budgets | 0,09 | 0,12 | 0,18 | 0,09 | 0,07 | | |
| own funds of enterprises and organizations | 88,99 | 86,8 | 89,64 | 90,65 | 92,45 | | |
| bank loans and other loans | 10,04 | 12,7 | 8,51 | 8,61 | 7,11 | | |
| of which loans from foreign banks | 0,04 | 0,09 | 1,22 | 0,3 | 0,01 | | |
| funds of domestic investment companies, funds, etc. | 0,17 | 0,15 | X | 0,07 | 0,05 | | |
| funds of foreign investors | 0,01 | 0,01 | X | X | X | | |
| funds of the population for the construction | | | | | | | |
| of their own apartments | X | X | X | X | X | | |
| other sources of funding | 0,03 | 0,04 | 0,03 | X | X | | |
| Agriculture, hunting a | and relate | d service | es | | | | |
| Used capital investment, total | 100 | 100 | 100 | 100 | 100 | | |
| state budget funds | 0,21 | 0,19 | 0,31 | X | X | | |
| funds from local budgets | 0,11 | 0,09 | 0,13 | 0,01 | 0,05 | | |
| own funds of enterprises and organizations | 85,67 | 86,79 | 89,85 | 90,82 | 88,53 | | |
| bank loans and other loans | 14,01 | 12,92 | 8,58 | 8,84 | 11,14 | | |
| of which loans from foreign banks | X | X | 1,13 | 0,31 | 0,28 | | |
| funds of domestic investment companies, funds, etc. | X | X | X | X | X | | |
| funds of foreign investors | Х | 0,01 | X | X | X | | |
| funds of the population for the construction | | , | | | | | |
| of their own apartments | X | X | X | X | X | | |
| other sources of funding | X | X | X | 0,02 | X | | |

x – data are not published in order to ensure compliance with the requirements of the Law of Ukraine «On State Statistics» on the confidentiality of statistical information, or are missing, and therefore not calculated for the table;

Source: calculated and compiled by the authors on the basis of data [1]

The sharp decline in investment in 2020 will have a negative impact on agricultural output in the short term, given the shortage of crops and the need to meet export commitments in 2021 may disrupt the self-sufficiency of the domestic market for certain foods, feeds and some other products.

Table 6

Equation of the trend of the main trends in the development
of the agricultural sector of Ukraine

| Type of trend function | f trend function Trend equation | | | | | |
|--|---|------------|--|--|--|--|
| Share of agricultural sector in total gross value added (in actual prices) | | | | | | |
| Expotential | $y=257399e^{0,137x}$ | 0,8116 | | | | |
| Linear | y=58504x+223589 | 0,7567 | | | | |
| Logarithmic | y=130521ln(x)+274129 | 0,6085 | | | | |
| Degrees | $y=287868x^{0,152}$ | 0,6850 | | | | |
| Imports | of agricultural raw materials, % of tot | al imports | | | | |
| Expotential | $y=8,8758e^{0,0388x}$ | 0,7505 | | | | |
| Linear | <i>y</i> =0,395 <i>x</i> +8,807 | 0,7548 | | | | |
| Logarithmic | ithmic $y=0.8601\ln(x)+9.1685$ | | | | | |
| Degrees | $y=9,1958x^{0,0846}$ | 0,5762 | | | | |
| Exports of agricultural raw materials, % of total merchandise exports | | | | | | |
| Expotential | $y=40,441e^{0,0031x}$ | 0,0091 | | | | |
| Linear | y=0.121x+40.505 | 0,0080 | | | | |
| Logarithmic | y=0.30681ln(x)+40.574 | 0,0083 | | | | |
| Degrees | $y=9,1958x^{0,0846}$ | 0,0084 | | | | |
| Foreign direct investment in Ukraine, mln. USA | | | | | | |
| Expotential | tential $y=43359e^{0.0629x}$ | | | | | |
| Linear | <i>y</i> =3383,9 <i>x</i> +45324 | 0,7706 | | | | |
| Logarithmic | y=7636,5ln(x)+45324 | 0,6340 | | | | |
| Degrees $y=45670x^{0,1429}$ | | 0,6507 | | | | |

The slowdown in agricultural investment activity is due to the unstable economic and political situation in the country, as well as the fact that working conditions are deteriorating every year, increasing risks for investors in terms of instability and unprofitability of the industry.

Among the important reasons for the decline in investment in the agricultural sector are unfavorable agricultural policies for producers, reduction of budget support for producers, narrowing investment opportunities, unacceptable investment risks for potential investors, and so on.

The main components of investment support are production, financial and economic resources and resources of investment activity; natural and labor resources, which together form the investment potential of the agricultural enterprise, in particular, determine the economic, environmental and social components of its structure, each of which, in turn, is a system of varying complexity and performs its functions within the overall system.

The development of the agricultural sector is characterized by an increase in the power function, in addition, all constructed regression functions are adequate, because the actual values of the coefficients of determination are higher than the table. The obtained dependencies make it possible to predict the main trends in the development of the agricultural sector, and is a prerequisite for assessing the effectiveness of investment support of the agricultural sector of Ukraine.

References:

- 1. State Statistics Service of Ukraine. Available at: http://www.ukrstat.gov.ua/ (accessed 17.05.2022).
- 2. Zhivko M. (2018) New economy: synergy of informatization and global civil society. *Journal of European Economy*, vol. 17, no. 1, pp. 36–58. Available at: http://dspace.wunu.edu.ua/handle/316497/3148 (accessed 17.03.2022).
- 3. Kalenska V.P. (2021) System of investment support of agricultural enterprises in radiation-contaminated areas [Text]: dis. ... Candidate of Economic Sciences / VP Kalenska; 08.00.04 economics and management, enterprises (by type of economic activity). Zhytomyr: PNU, 217 p.
- 4. Kryvovyazyuk I.V. (2018) Investment activity of the enterprise: essence, methods of analysis and ways to increase its effectiveness. *Scientific Bulletin of Kherson State University*. *Ser.: Economic Sciences*, vol. 31, pp. 83–90. Available at: http://nbuv.gov.ua/UJRN/Nvkhdu_en_2018_31_19 (accessed 17.03.2022).
- 5. Lewandowski O.T. (2020) Organizational and economic principles of investment activity in the field of agribusiness: Monograph. Ivano-Frankivsk: Prykarpattia. nat. university named Vasily Stefanik, 347 p.
- 6. Lewandowski O.T. (2021) Organizational and economic principles of investment activity of agricultural enterprises in terms of market transformations [Text]: dis. ... Dr. Econ. Sciences: 08.00.04. Levandivsky Omelyan Tarasovich; Lviv. nat. agrarian. un-t. Lviv, 440 p.
- 7. Matsibora T.V. (2020) Trends in the development of investment activity in the agricultural sector of Ukraine's economy. *Economics of agro-industrial complex*, no. 4, pp. 26–34. DOI: https://doi.org/10.32317/2221-1055.202004026
- 8. Melnyk V., Pogrishchuk O. (2018) Investment support of the agricultural sector: expanding opportunities for Ukraine. *Visnyk of Ternopil National University of Economics*, vol. 3, pp. 23–34. Available at: http://nbuv.gov.ua/UJRN/Vtneu_2018_3_4 (accessed 20.04.2022).
- 9. Nkaya B.J., Larka M.I. (2016) The role and importance of investment in the activities of enterprises. Strategies of innovative development of the economy of Ukraine: problems, prospects, efficiency «Forward-2016». 7 International. scientific-practical Internet conference stud. and young scientists. December 27, 2016. Kharkiv: NTU «KHPI», pp. 155–156.
- 10. Official site of the State Statistics Service of Ukraine. Statistical information. Available at: http://www.ukrstat.gov.ua (accessed 17.05.2022).
- 11. Estimation of the volume of foreign investments in which the ultimate controlling investor is a resident. National Bank of Ukraine: website. Available at: https://bank.gov.ua/ua/file/download?file=FDI_round_tripping_ICLDFS.pdf (accessed 16.08.2021).
- 12. Patika N.I. (2018) Foreign investments in agriculture of Ukraine: current status and impact on its development. *Investments: practice and experience*, no. 5. pp. 26–31.
- 13. Agriculture of Ukraine for 2019: statistical yearbook. Kyiv: State Statistics Service of Ukraine, 2020. 230 p.

- 14. Skopenko N. (2011) Foreign direct investment in agriculture: advantages, disadvantages, risks. *Scientific Bulletin. Series: Finance, banks, investments*, no. 2, pp. 58–62. Available at: http://dspace.nuft.edu.ua/jspui/bitstream/123456789/15055/1/_58_62.pdf (accessed 18.04.2022).
- 15. Statistical information on investment activities of agriculture, forestry and fisheries. State Statistics Service of Ukraine. Kyiv, 2019. Available at: http://www.ukrstat.gov.ua/(accessed 14.04.2020).
- 16. Tkachenko S.E. (2021) Analysis of investment activity in the agricultural sector of Ukraine, identification of factors and ways to intensify it. *Economy and society*, no. 23. Available at: https://economyandsociety.in.ua/index.php/journal/article/view/138/133 (accessed 14.09.2021).
- 17. Fedko I.V. Models of functioning of the Export Credit Agency. Financial economic analysis office in the VRU. Available at: https://feao.org.ua/wpcontent/uploads/2017/02/FEAO_EKA.pdf (accessed 16.03.2020).
- 18. Khoroshun Yu. V., Prodanova L.V., Zakharova O.V. Analysis of sources of investment resources of the agricultural sector of the economy of Ukraine. *Economics and organization of management*, no. 4, pp. 99–117. Available at: http://nbuv.gov.ua/UJRN/eiou_2021_4_12 (accessed 17.05.2022).
- 19. Yurchyshyn V.V. (2013) On the problem of systemic reorientation of agrosphere development on the basis of socio-economy. *Economics of agro-industrial complex*, no. 11, pp. 6–17.
- 20. Official site of FAO. FAO Food Price Index. Available at: http://www.fao.org/worldfoodsituation/foodpricesindex/en. (accessed 17.05.2022).