

Critical Aspects of Financial Support towards the Development of the Agricultural Sector of Ukraine

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Abstract. The paper substantiates that the reliable food supply of the population is strategically dominant for strengthening the food and, also, the national security of any country and its sustainable development. The purpose of the article is to substantiate the essence of the state financial support for the agricultural sector development, its role in ensuring sustainable growth, and to elaborate an evaluation of the state financial support effectiveness in Ukraine. The article defines that the financing of the agriculture sector is a factor that can be attributed to both ensuring the functionality of this sector and stimulating its development. Volumes of financing via programs of state financial support for agrarian sector enterprises of Ukraine in 2019-21 were analyzed and divergent trends in their financing were identified. However, considering the increasing trend of the effect of returns in financial support via corporate income tax, the state support programs for agricultural producers should be expanded and increased in funding. At the same time, it is proposed that agricultural producers more actively resort to preferential bank lending due to its incentive features.

Keywords: Agricultural Sector, Financial Support, Lending.

1 Introduction

Current realities of life testify to the leading role of agriculture as a vital economic sector of countries around the world, which, firstly, provides the population with food products and, secondly, it is a raw material base for other sectors of industry, etc. The reliable food supply of the population is strategically dominant for strengthening the food and, also, the national security of any country and its sustainable development. At the same time, rapid changes in the socio-economic and political situation in the global world and the need to ensure food security require increasing attention to the development of the agricultural sector. According to world experience, the modern agricultural economy must be based on innovations that should equally apply to al-

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most all production factors: equipment, technologies, animal breeds, plant varieties, financing, logistics, etc. New scientific ideas appeared regarding the correlation between the economy, including agriculture, and ecology at the international, national, and regional levels, which can be summarized in the need to evaluate human needs and the production of material goods, considering the possibilities of our planet to "give back" resources and "recycle" human waste [1]. Therefore, the financing of the agricultural sector is a factor that, without exaggeration, can be attributed to both ensuring the functionality of this sector and stimulating its development. So, it is not surprising that the research of existing and development of new approaches to the financing of agrarian entities and the assessment of their efficiency have intensified. As an example, we may consider the Common Agricultural Policy of the EU, which is set out in such regulatory documents as EU Regulation 2021/2115, EU Regulation 2021/2116 and EU Regulation 2021/2117 [2]. Ukraine has been granted the EU candidate status and pays particular attention to the prompt convergence of all aspects of policy and legislation (including the development of the agricultural sector) to EU policies, norms, and rules. Presently, an Agreement has been signed between the Government of Ukraine and the European Commission on the financing of the measure 'EU support for the development of agriculture and small farms in Ukraine" that is consistent with the Association Agreement between Ukraine and the EU [3]. The formation of safe conditions for the development of rural areas requires the use of a balanced systemic approach and decision-making at all hierarchical levels of management of the national economy [4], in particular, the development of policies and programs of state financial support in the agricultural sector as part of the implementation of sectorial reforms.

Considering the existing challenges and threats on both national and global scales, the issue of ensuring the development of the agricultural sector is of high relevance, in terms of assessing its current state, ensuring state financial support for agricultural producers, developing international integration relationships between agricultural enterprises and as well as identifying problems and outlining prospects for their solution.

2 Relevant Research

Individual researchers and the international scientific community are actively studying the problems and prospects for the agricultural sector development and approaches to financing its needs. Various types of research are being conducted to identify directions of agricultural development, reduce poverty, and ensure the food security of individual states and the world. Thus, since 1986, the Organization for European Economic Cooperation (OECD) has been conducting research on the dynamics of state support for agricultural producers, resulting in the annual report "Monitoring and Evaluation of Agrarian Policy". The representative sample has increased from 20 to 54 countries today. The OECD does not provide funding but conducts research and analysis to help governments identify strategies to improve efficiency, growth, and innovation in agriculture [5]. A group of researchers, namely Nathan P. Hendricks,

Nelson B. Villoria, Aaron Smith and Matthieu Stigler in 2022 examined the effects of state agricultural policies on supply and productivity. Thus, confirming the thesis of Nobel laureate Theodore V. Schultz (1979) about the negative consequences of protectionism in agriculture, the researchers concluded that "the elimination of destructive state intervention increases productivity", and the strengthening of economic incentives encourages improved agricultural technologies and innovations [6]. In the scope of view of Ukrainian scientists and economists, the issue of state financial support for the agricultural sector of Ukraine's economy remains relevant. So, for example, Vasyl P. Riabokon [7] examines the issues of state support for various types of agricultural producers, the current condition and strategic directions of the state agrarian policy implementation regarding financial support for the agriculture development of Ukraine. However, despite numerous studies, the issue of state support for the agricultural sector remains relevant, because transformational changes, challenges and threats faced by agricultural producers require new ideas for solving the problem of relations between the state and agrarian entrepreneurship in the context of Ukraine's integration into the European economic space and need further in-depth study.

3 Research Methodology

Such method as analysis and synthesis has been used for the research. In particular, this method made it possible to consider the world experience of state support for agribusiness in the most successful countries. The system-structural analysis method enabled us to carry out a systematic analysis of the goals of sustainable development of Ukraine and state support measures for agrarian sector development. With the help of this method, the authors formed preferred directions and measures of state support for the agricultural sector. The comparative method enabled us to follow the dynamics of the allocation of state support to the agricultural sector of Ukraine in 2018-22 [8], as well as to highlight the peculiarities of specific programs implemented by the State in the studied years.

4 Obtained Research Results

Agricultural development is one of the most powerful tools for ending extreme poverty, increasing shared prosperity, and feeding the projected 9.7 billion people by 2050. Growth in the agricultural sector is two to four times more effective in raising the incomes of the poorest in comparison to other sectors [9]. However, today more than ever, food security is at risk due to multiple shocks from disruptions in agricultural production and supply caused by COVID-19, extreme weather, pests, and more. The russian invasion of Ukraine has precipitated a global food crisis that has driven millions of people into extreme poverty, and some 205 million people in 45 countries have so little food that their lives are at risk [9]. Simultaneously, world experience convinces us that the creation and development of sustainable, economically balanced agricultural production in the country is made possible by the implementation of targeted state support. Historically, almost every state has actively intervened in the

agricultural sector due to the need to ensure sufficient and affordable food for the population and an appropriate income level for agricultural producers. Each country has its features regarding state support for agriculture. According to the OECD report in 2022, the 54 monitored countries provided an average of \$ 611 billion per year of positive support to agricultural producers during 2019-21. However, according to OECD Director for Trade and Agriculture M. Jansen, although "state support for agriculture has reached a record level; the share of support aimed at stimulating sustainable productivity growth has decreased" [10].

Agriculture is crucial to economic growth, accounting for 4% of the global GDP [9]. The Ukrainian economy is no exception because the agricultural sector is its major component; its share in the national GDP during 2018-21 was 10-13% [8]. Simultaneously, rapid changes in the socio-economic and political situation in the global space, as well as trends in the development of world agriculture and the need to ensure food security, require increased attention to the development of the agricultural sector. Thus, following the goals of sustainable development of Ukraine for the period up to 2030 [3], set considering the 17 global goals of sustainable development [11] adopted at the UN Summit on Sustainable Development, financial support is provided to recipients in specific areas (Table 1).

Table 1. Volumes of financing via programs of state financial support for agribusiness of Ukraine in 2019-21.

Indicators	The actual volume of financing, UAH million			Growth rate, %	
	2019	2020	2021	2020/ 2019	2021 /2020
State support for the livestock industry	2433.6	0	0	-100	-
State support for the development of hops, young orchards, vineyards and berry orchards	397.9	0	0	-100	-
Provision of loans to farms	225.1	65.6	50.	-70.9	-23.8
Financial support of measures in the agriculture by reducing the cost of loans	449.9	0	0	-100	-
Financial support for the development of farms	420.4	0	0	-100	-
Financial support of agricultural producers	640.8	3965.8	4662.4	+518.9	+17.6
In total	4657.7	4031.4	4712.4	-13.4	+16.9

Source: Compiled based on [12]

The Table 1 data show that the largest amounts of state financial support are allocated to programs for the development of agricultural producers and the provision of loans to farms. During 2019-21, the amount of financial support for agricultural producers amounted to 9269 UAH million; the growth rate in 2021 compared to 2020 was 17.6%. Also, in the studied period, programs for providing loans to farms were financed in the amount of 340.7 UAH million, but their volume decreases annually,

the rate of reduction in 2021 is -23.8%. In addition, funding has been suspended in 2020-21 under programs to support the livestock industry, the development of hops, planting young orchards and vineyards, berry orchards, reducing the cost of loans, and supporting the development of farms.

It is worth noting that because of the full-scale war launched by russia against Ukraine in 2022, the Ukrainian economy shrank by more than 35%, which directly affected the amount of state support for the agricultural sector. At the same time, it is worth studying approaches to evaluating the effect that the state receives via the provision of financial support to agriculture. Thus, we suppose it is possible to indirectly determine the effect of state financing support via indicators of the agricultural products sold volume and budget tax revenues. The data in Table 2 demonstrate the dynamics of financial support for agriculture in Ukraine for 2018-21, its shares in the capital of agricultural entities, and the amount of financial support returned via budget tax revenues, namely corporate income tax.

Indicators	2018	2019	2020	2021
Actual volume of financial support for agribusiness, UAH billion	4.2	4.6	4.0	4.7
Capital of agricultural entities, UAH billion	973.9	1020.6	1120.8	1332.0
The share of state financial support in the capital of agricultural entities, %	0.43	0.45	0.36	0.35
Corporate income tax of agribusiness, UAH billion	0.5	0.8	0.6	1.2
The effect of returns in financial support via corpo-	11.90	17.39	15.00	25.53

Table 2. Volumes of financial support refunds via tax revenues to the budget in 2018-21.

rate income tax of agribusiness, %
Source: Compiled based on [8, 12]

Thus, it can be affirmed that state financial support contributes to the development of agriculture, its profitability, and the increasing revenues of the state budget because of the returns on financial support (see Figure 1).

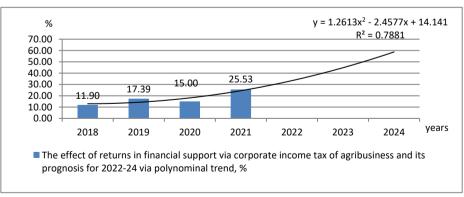


Fig. 1. The effect of returns in financial support via corporate income tax of agribusiness and its prognosis for 2022-24 via polynomial trend, %.

In Ukraine, state support programs for farmers include such priority areas as animal husbandry, horticulture, farming, and, also, reducing the price of loans and purchasing equipment. These programs were adapted to the new conditions and needs of agricultural producers, which made it possible to single out such areas as crop insurance, support for niche and organic production, and beekeeping. Thus, the livestock support program for 2021-23 provides for the provision of special budget subsidies for the reconstruction of farms and complexes, changes in the structure of production, improvement of the qualitative composition of livestock, and support of biodiversity and biological safety. Support for the development of horticulture, viticulture and hops is provided by partial reimbursement of the cost of purchasing planting material for fruit and berry crops, grapes, and hops, carrying out works on the construction of trellises and installing drip irrigation systems and purchasing materials necessary for carrying out such works. Subsidies are also provided for new construction and reconstruction of refrigerators, primary processing shops, fruit and berry freezing facilities, purchase of product processing lines, and automated drying and processing lines.

In our opinion, in addition to state financial support, bank loans are a significant source of financial support for agricultural production. Currently, loans to farmers make up 14.8% of the loans issued in the amount of 21.5 billion USD, JSC Raiffeisen Bank remains the unchanging leader in crediting farmers based on the sum of loans granted: at the beginning of 2022, the sum of loans granted was 0.48 billion USD, and at the beginning of 2023 it summed to 0.62 billion USD. The second place is occupied by JSC Procredit Bank: 0.25 and 0.28 billion USD in 2022-2023, and the third place is JSC Credit Agricole Bank: 0.19 and 0.25 billion USD in 2022-2023. Next come state banks, which lend to farmers under the state program "Affordable Loans 5-7-9%" [12]. Domestic producers may take advantage of such bank loans: JSC Raiffeisen Bank offers revolving credit lines 18.0% - 18.5%; partner programs for the purchase of agricultural machinery, equipment, and plant protection products 0.01-21.0%: investment loan for the purchase of agricultural machinery and equipment 19.5% - 22.0%; promissory note programs - commission 1-6% [13]. JSC "Credit Agricole Bank" offers 20% loans for the purchase of agricultural machinery and equipment, and financial leasing programs with compensation from the EBRD [14].

5 Conclusions

State financial support of agriculture is the mechanism for the implementation of state policy in the agrarian sphere, accompanied by the creation of favourable economic, organizational, and legal conditions for the development of agrarian production. It covers budgetary financing of programs aimed at the development of the industry, a preferential tax regime, partial compensation of commercial banks loans' interest rates, write-off of bad debts to the budget, as well as programs to support technologies and innovations.

An increase in the share of raw material exports can have an extremely negative impact on economic growth in the industry. In many countries, the main support is directed to the sustainable development of territories, supply chains, organic produc-

tion of products and ensuring the safety of food products for consumers. This experience can also be useful in reforming and improving the system of state support for agriculture in Ukraine. Taking into account the analysis of the actual financing of state programs of financial support for agribusiness, we can talk about its sufficiently high efficiency. The calculation of the effect of returns in financial support via corporate income tax of agribusiness and its prognosis for the following three years shows a positive growth trend. The combination of this support with agribusiness lending by banks should have a positive effect on the financial stability and sustainable development of the agriculture of Ukraine.

The important problem that international donor organizations partially help to solve is the financing of rural households and small farms, which are the basis of the fight against unemployment and the guarantee of inclusive economic growth in rural areas. The programs of the FAO and other donors in Ukraine are available only to large agricultural producers that own 250-1000 ha of land; and for small farms that make up the vast majority no such donor support is provided. Therefore, their introduction and implementation will support agribusiness in Ukraine and ensure its development in the post-war period.

References

- Kalachenkova, K., Melnyk, S., Pavliuchenko, Y., Titova, O., Kvasnytska, R. Principles of Business Activity in the Context of Sustainable Development. Lecture Notes in Networks and Systems 194, 273–285 (2021).
- 2. EUR-Lex, https://eur-lex.europa.eu/homepage.html?locale=en, last accessed 2023/04/15.
- 3. Verkhovna Rada of Ukraine. Official webportal, https://www.rada.gov.ua/en, last accessed 2023/04/15.
- 4. Forkun, I.V., Prystemskyi, O.S., Chernenko, O.S., Chkan, I.A., Yakusheva, I.Ye. Institutionalization of State Support and Development of Sectoral Entrepreneurship of Rural Areas. Public Policy and Administration 20, 454-463 (2021).
- 5. OECD Agriculture, https://www.oecd.org/agriculture/, last accessed 2023/04/18.
- 6. Hendricks, N. P., Smith, A., Villoria, N. B., Stigler, M. The effects of agricultural policy on supply and productivity: Evidence from differential changes in distortions. Agricultural Economics, 1-18 (2022).
- Riabokon, V.P. Socio-economic conditions of agricultural sector development. Ekonomika APK 2, 6–14 (2021).
- 8. State Statistics Service of Ukraine, https://www.ukrstat.gov.ua/, last accessed 2023/04/18.
- 9. Agriculture and Food. The World Bank, https://cutt.ly/p6cNLr4. last accessed 2023/04/25.
- 10. OECD Support to agriculture, https://cutt.ly/M5qDxm1, last accessed 2023/04/18.
- 11. Transforming our world, https://sdgs.un.org/2030agenda, last accessed 2023/05/04.
- 12. Opendatabot, https://opendatabot.ua/analytics/agrocredits-2022, last accessed 2023/04/19.
- 13. JSC RAIFFEISEN BANK, https://raiffeisen.ua/, last accessed 2023/05/04.
- 14. JSC "CREDIT-AGRICOLE BANK", https://credit-agricole.ua/, last accessed 2023/05/04.

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