Social Sciences Research

We believe in A KNOWLEDGE BASED SOCIETY

Latvia University of Life Sciences and Technologies

ESAF
Ekonomikas un sabiedrības attīstības fakultāte

21th International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

BANKU AUGSTSKOLA
BA SCHOOL OF BUSINESS AND FINANCE

SPENDING REVIEW AS ESSENTIAL PART OF PUBLIC SECTOR BUDGETING: LATVIAN EXPERIENCE

Kārlis Ketners, Dr.oec., professor
BA School of Business and Finance

Abstract

One of the modern trends in public sector budget governance is evaluation of allocation of the resources, re-allocation of budget resources to achieve political goals and ensure sustainable financing for different public needs. This study is the first analysis of Latvian experience of public spending reviews in 2016 – 2019, characterize present patterns and propose changes for future spending reviews.

Aim

The aim of the paper is to analyse the Latvian experience of regular public spending reviews.

Tasks

1) to examine legislation related to the spending reviews; 2) to analyse the characteristics of spending reviews in Latvia.

Materials and methods

The scientific literature review, analysis and synthesis, induction and deduction methods were employed to execute the research.
Statistics and other information of the Ministry of Finance of the Republic of Latvia constitutes background for the paper.

Results

Latvia is example of countries that use the selective spending review approach, choosing review topics in each round of spending review. In Latvian experience pension and benefit systems, system of compensation of pharmaceuticals, information technology resources and management were analyzed. Also a comprehensive spending review, that is not limited to any predefined list of review topics where the ministry of finance and line ministries are conducting search for the best savings options is done in Latvia. Latvian spending reviews also includes negotiations with line ministries and review of expenditures to find possible savings. Based on the literature analysis and taking into consideration coverage and interventions, spending reviews can be classified into three main categories (see Table 1). Latvian spending review experience combines both approaches – the Cabinet of Ministers in the spring defines the scope of the spending review and this approach close to the selective spending review, but during the process line ministries and finance ministry undertake other measures for savings and reallocation of the resources.

Table 1

Comparison of spending review approaches

Approaches and features	Strategic review	Technical review	Medium-term review
Spending review function	Centralised, comparable departmental/programme review	Decentralized, single internal/external review of function/programme	Centralised review of a specific function within ministries, e.g. real estate, ICT solutions
Coverage	Efficiency and effectiveness	Efficiency	Efficiency and performance evaluation
Evaluation issues	Several issues - Operational/impact/ relevance to the current policy	One issue: operational issue	One issue: operational issue
The flow of the process	Bottom-up	Top-down	Top-down
Interventions	Efficiency gains and centralised priority settings	Efficiency gains and linear cuts	Medium-term gains and initial investments

Source: created by an author, based on Robinson, 2018

As an official starting point for Latvian spending reviews are amendments to the Law on Budget and Financial Management delegating to the Cabinet on the scope of the State budget spending review. Since 2016 to ensure the interaction, evaluate possible reforms that would increase successful use of budget resources, as well as regularly assess possibilities to optimise the budget expenditure and to make proposals on these issues to the Cabinet of Ministers, the government decided to create the permanent inter-institutional Working group. The resolution of the Minister of Finance approved the working group and its task is to make proposals for the spending review priorities. In 2016 a comprehensive spending review was carried out which included assessment of all expenditure of the ministries. The civil servants, considering their knowledge of the public administration processes and finance, did the initial expenditure evaluation. Since 2019 the parliamentary secretary of the Ministry of Finance Atis Zakatistovs chairs the working group, thereby ensuring the political involvement in the spending review process. Also in 2019 for the first time, spending ministry ministers participated in the working group, discussing the sector funding policy revision possibilities.

Spending Review is an integral part of the preparation of the State budget and consists of the following elements – Scope; Staff; Platform; Discussions; Results and Accountability.

The most notable achievements of the spending review during these years are:

- In 2016 – comprehensive spending review, review of all budget expenditure. As a result, "scorecards" were introduced showing the link between resources and policy goals. It helps to understand how much resources (financial and human) has been invested and what are the main benefits for society. An Interactive Budget Infographic has been created, which allows the user to familiarize himself with nine areas of the budget (e.g. health, education, social security) and the funding allocated to them, as well as get to know detailed information on investment directions in each sector and funding source. Visualized budgets of the ministries and other central government institutions where the user can get to know about the areas of activity, allocated funding and the main benefits for the society. To ensure the transparency of the health care budget, changes have been made in the structure of the budget programs of the Ministry of Health.
- In 2017 together with sector and Bank of Latvia experts, a zero-based budgeting pilot project was prepared for the reimbursed pharmaceuticals. In addition, several regulatory enactments have also been amended, thus reducing the administrative burden on ministries and replacing technical activities with analytical ones. An evaluation of the state budget institutions in the field of public service delivery and ICT areas were made.
- In 2018 evaluation of real estate used for the needs of ministries, their subordinate state budget institutions and other central state budget institutions and their management expenses. Prepared proposals for the state budget institutions information and communication technology optimization.
- 2019 annual spending review was structured into three main areas: revision of the sector policies, revision of the state budget programs, and improvement of processes and systems. In the revision of the sector policies, significant emphasis was on the expenditure areas of the Ministry of Health and the Ministry of Education.

During the years, the role of strategic review with evaluation of achieved results and allocated resources is increasing as well as the reallocation of the resources within ministries (sectors) is increasing. The spending reviews have information base which contains historical data of performance indicators and resources granted for priority expenditures, as well as different sections. Expert working groups conclusions and suggestions also forms knowledge base for identification of savings options and reallocation decisions.

Conclusion

1. Spending review is an essential part of public sector budgeting, ensuring reallocation of the resources and efficiency of public spending. Law on budget and finance management provides an obligation to conduct the review.
2. Medium-Term and Comprehensive Spending Review is a significant step forward from the annual incrementalism of the past. Medium-term orientation and a meaningful discussion of long-term objectives for spending are crucial, and it allows much more focus on delivery and spend-to-save reforms through which a line-ministry can invest in changes in year one to produce savings further and also essential to underpin the credibility of medium-term budget planning.

21th International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

Batumi Shota Rustaveli State University

PERSPECTIVES AND OPPORTUNITIES OF GEORGIAN FINANCIAL MARKET INTEGRATION INTO EU

Asie Tsintsadze, Irina Vashakmadze, Irina Tavadze, Lilit Meloyan-Phutkaradze
Batumi Shota Rustaveli State University

Abstract

Full integration of the financial market with Europe is a necessary requirement of a market economy. The circulation of financial resources between different countries of the world creates opportunities for the growth of the economy of each of them, as the share of foreign investments both inside the country and abroad increases. The ability of developing countries to integrate with Europe is limited because of their economic situation. In the article, the economic growth achieved before and after the European Association Agreement in the development of the financial markets will be an indicator of the opportunities and prospects for European integration.

Aim

The aim of this paper is to identify the obstacles and opportunities that hinder or facilitate the integration process.

Tasks

The consequences of the Agreement on the European Association and statistics on the economic development of financial institutions will be studied, on the basis of which we can discuss the possibilities and prospects of European integration.

Materials and methods

Using empirical analysis, the article identifies trends in the country's financial market development, comparing it with the level of development of financial institutions in European countries and outlines opportunities and problems associated with the implementation of the association directives in relation to both market development and European directives. The information sources used includes the data of the Organization for Economic Co-operation and Development, and the National Statistics Office Georgia, and the National Bank of Georgia.

Results

Over the past two years, the National Bank of Georgia has developed, improved, and implemented numerous regulations, which in the short term will slow down retail lending, increase expenditures in the sector, increase capital demand and reduce profitability in the short term.
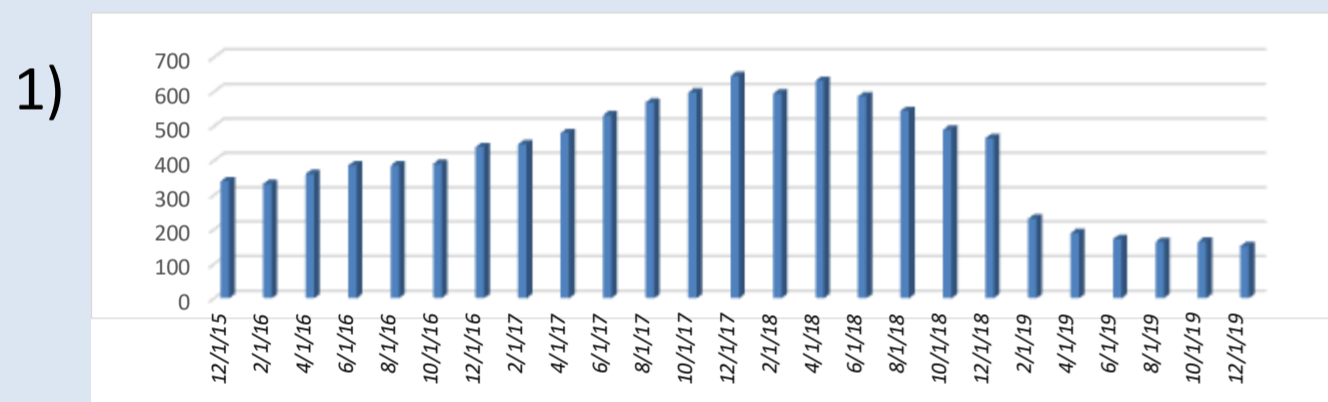
1)

Figure 1. Consumer Loan (thousand GEL)

As the diagram shows, among individual loans, the short-term consumer loans are most reduced. A reduction in lending automatically means a decrease in the amount of disposable free funds, which leads to a decrease in total local demand. Demand reduction in turn has a negative impact on business sector revenues and the expenses incurred / to be incurred by them. As a result, economic activity and growth rates decline in the short term.

2) The purpose of this article is to assess the quality of integration in relation to the development of the insurance market, the main indicator of which is the amount of premium attracted.

Figure. 2 Premiums Attracted in the Insurance Market 2017-2018.

The diagram shows that the volume of attracted premiums is not steadily increasing. The reason for this is excessive politicization. This regulation, on the one hand, brought the country closer to European values in relation to the protection of human rights, and on the other hand, stimulated the development of insurance companies by introducing new insurance products

3) The second indicator that can be used to estimate population involvement in the development of insurance is the density of insurance
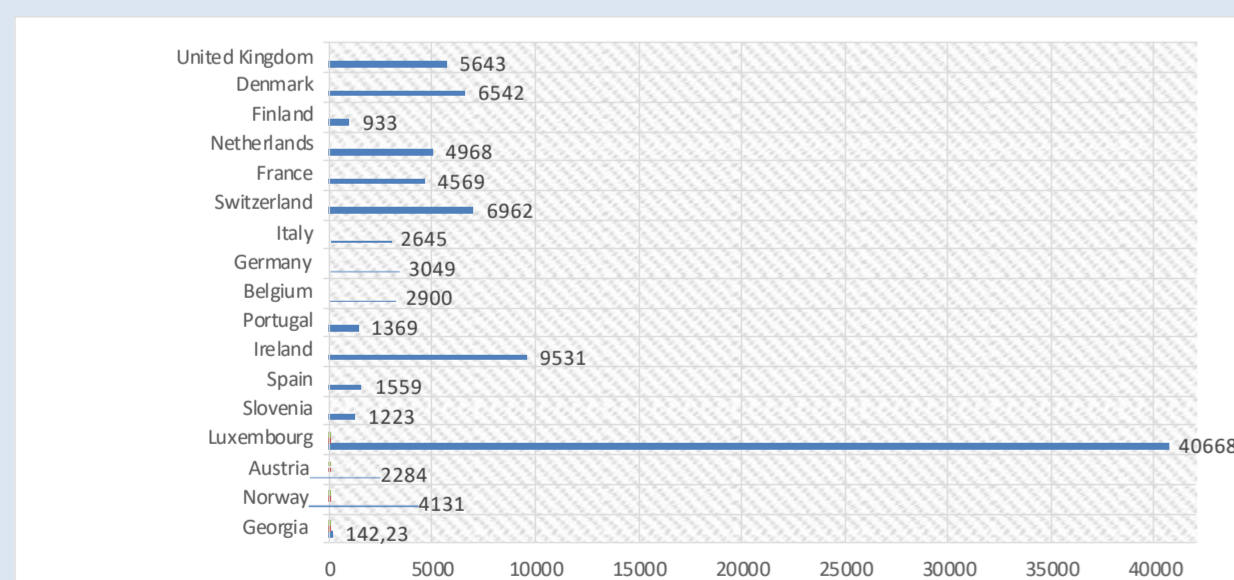

Figure. 3 Density of Insurance Europe and Georgia, 2018

In this case Georgia has the lowest rate of per capita insurance premium. The circle of problems that hinder the full integration of the insurance market with the European insurance market is as follows: 1) Low insurance culture of the population; 2) Neglect of the expected risks by both the legal entities and individuals; 3) Underdeveloped accumulated life insurance; 4) The problem of placing free reserves of insurance companies in high-yield securities due to the underdeveloped stock market, consequently leading to low investment return of the companies

Conclusion: As a result of the study, problems of integration of the main players of the financial market with Europe were identified and recommendations were developed. Namely: A reduction in lending automatically means a decrease in the amount of disposable free funds, which leads to a decrease in total local demand. Demand reduction in turn has a negative impact on business sector revenues and the expenses incurred / to be incurred by them. As a result, economic activity and growth rates decline in the short term. We believe that elimination of the problems identified in the development of the financial market can be achieved through the improvement of the legislative framework, which implies that stock exchange institutions will be fully capable to comply with the directives under the European Association Agreement.

Latvia University of Life Sciences and Technologies

ESAF
Ekonomikas un sabiedrības attīstības fakultāte

21th International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

National University of Life and Environmental Sciences of Ukraine

ASSESSMENT OF THE FINANCIAL STABILITY LEVEL OF UKRAINIAN AGRARIAN CORPORATIONS

Nadiia Davydenko Prof. dr hab.; **Alina Buriak** PhD; **Olena Lemishko** PhD ;**Zoia Titenko** PhD; Department of Finance, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine

Abstract

The article analyzes the financial stability of agricultural corporations.It is substantiated that the unstable financial condition of some agrarian corporations is a consequence of the lack of organization of management of specific subsystems of their economic activity.

The practical significance of the results obtained is determined by the fact that conclusions and suggestions can be used for more objective decision-making, which based on the analysis of financial ratios, and in turn can be the basis for making optimal financial decisions. This material can be used to make strategic management decisions by agroholding managers.

Aim

The purpose of the article is to substantiate theoretical provisions and develop recommendations for ensuring the adequacy and systematic process of evaluating the financial stability of agricultural corporations based on the analysis of financial ratios.

Tasks

The assessment of the financial state within the context of financial security, analysis of financial sustainability of agricultural enterprises

Materials and methods

The methodological basis of the article is general scientific and special methods of research, which are based on modern scientific concepts of management, economic and related sciences.
The following methods were used in the study: monographic (comparing and detailing the data of financial stability analysis of agrarian corporations); abstract-logical (used to formulate theoretical generalizations and conclusions).

Results

We believe that the financial security of the enterprise is an effective result of equivalent components: Indicators of financial condition, financial stability and the level of its capitalization.

The assessment of the financial stability of the enterprise aims at an objective analysis of the size and structure of the assets and liabilities of the enterprise and to determine on this basis the degree of financial stability and independence, as well as the conformity of financial and economic activity of the enterprise with the objectives of its statutory activity.

Thus, the coefficient of autonomy shows the share of own and equivalent financial resources in the total capital of the agricultural entity and characterizes the degree of its independence from the borrowed capital(table 1).

As higher the value of this ratio, than more financially sound, stable and more independent from external creditors the enterprise is. The recommended value of the coefficient of autonomy is 0,5 (50%). that is, the total amount of capital must be at least half formed at the expense of the enterprise's own funds, the solvency ratio should be at least 0.5. Thus, in 2006 - 2018, the highest rates were observed in Agroton (0.89), Industrial Dairy Company (0.61), Kernel - Trade (0.53). Mironovsky Bakery (0.41), Avangard (0.07) and Ukrprodukt (0.07) were below the recommended values. This indicates a critically low share of equity in the total amount of advanced capital, which makes enterprises financially unsustainable and dependent on borrowed funds.

Table 1

Dynamics of solvency ratio change (autonomy)

Companies	Solvency ratio (autonomy)												
Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Kernel-trade	-0,05	-0,01	0,003	0,02	0,02	0,62	0,56	0,57	0,54	0,61	0,66	0,57	0,53
Agroton	0,53	0,55	0,29	0,44	0,84	0,66	0,67	0,65	0,45	0,66	0,87	0,87	0,89
Raise-Agro	0,2	0,32	0,08	0,08	0,08	0,06	0,03	0,20	0,04	0,03	0,05	0,04	0,06
Myronivsky bakery	0,43	0,42	0,35	0,38	0,55	0,48	0,48	0,45	0,41	0,32	0,33	0,43	0,41
Astarta Kyiv	0,52	0,57	0,34	0,51	0,59	0,54	0,53	0,55	0,43	0,49	0,61	0,65	0,50
Industrial dairy company	0,19	0,55	0,44	0,51	0,8	0,77	0,52	0,42	0,14	0,32	0,41	0,57	0,61
Avangard	0,11	0,13	0,12	0,43	0,49	0,71	0,73	0,76	0,60	0,35	0,24	0,15	0,07
Ukrproduct	0,59	0,68	0,71	0,80	0,75	0,62	0,57	0,55	0,43	0,27	0,16	0,14	0,07

Table 2

Dynamics of the coefficient of financing change

Companies	Coefficient of financing												
Years	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Kernel-trade	-19,47	-130,6	116,47	110,71	97,51	1,69	1,30	1,32	1,16	1,55	1,94	1,35	1,13
Agroton	0,89	0,82	2,48	1,24	0,18	1,99	2,09	1,85	0,83	1,93	6,59	6,78	7,98
Raise-Agro	13,93	12,14	12,05	11,99	11,22	7,16	4,13	0,24	0,04	0,03	0,06	0,06	0,06
Myronivsky bakery	0,29	0,46	1,88	1,63	1,51	0,93	0,91	0,82	0,70	0,48	0,50	0,76	0,7
Astarta Kyiv	0,93	0,74	1,93	0,95	0,67	1,18	1,12	1,21	0,77	0,96	1,60	1,87	1,02
Industrial dairy company	0,21	0,83	1,15	0,88	0,29	0,77	0,52	0,73	0,16	0,46	0,70	1,36	1,55
Avangard	5,71	6,44	7,61	1,34	2,39	2,52	2,79	3,72	1,58	0,57	0,33	0,18	0,07
Ukrproduct	0,27	0,36	0,41	0,25	0,33	3,07	1,64	1,34	1,22	0,75	0,37	0,07	0,16

The coefficient opposite to the coefficient of financial autonomy is ratio of financing, the critical value of which is 1. The coefficient of financing shows which part of the activity of the enterprise is financed at the expense of own funds, and which at the expense of the debt (table 2).

Thus, according to Table 2, the values of the Kernel-Trade, Agroton, Astarta-Kiev and Industrial Dairy companies' financing ratios are higher, which is indicative of an unstable financial position and high financial dependence on external creditors and investors.The rest of the analyzed companies have values lower than 1, that is, the lowest amount of liabilities per UAH 1 of own funds.

Thus, according to the results of the conducted analysis, it should be noted that the activity of agrarian corporations in Ukraine is unstable, despite the improvement of some indicators in 2011-2013. An unstable financial position causes disruption in the balance of payments, although the ability to restore the balance in payment means and payment obligations is retained by attracting temporarily free sources of funds: not expiredunpaid wage arrears, unpaid tax payments arrears, unpaid social security debts, unpaid debt on payments with suppliers, etc. However, since the capital in stocks is long enough and the maturities of these liabilities are short, investing in long-term assets causes considerable financial difficulties for the analyzed agricultural corporations.

Conclusion

The results of the study of the state and dynamics of financial stability of agrarian corporations showed that during 2008-2011 and 2016-2018 there was a change in the capital structure towards an increase in the share of equity, which indicates an increase in the level of financial stability.

In order to overcome the financial instability of the studied agricultural corporations and strengthen the competitiveness, it is advisable to use a comprehensive approach to improving financial management, whose main focus is in the short term - elimination of insolvency in case of loss of competitive advantages; in the medium term - elimination of causes that generate insolvency and adaptation to the conditions of activity in a competitive environment; in the long term - ensuring the financial stability of the agricultural corporation to the influence of external factors of the competitive environment.

Acknowledgements

FINANCIAL SECURITY FOR THE AGRARIAN SECTOR OF UKRAINE

Nadiia Davydenko Prof. dr hab.; **Alina Buriak** PhD; **Yuliia Nehoda** PhD ;**Yuliia Bilyak** PhD, **Nataliia Shevchenko**
PhD; Department of Finance, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine

Abstract

The conducted research has made it possible to establish that in recent years the financial security of the agricultural sector in Ukraine is carried out mainly through a set of programs, each of which is aimed at improving production efficiency. The article substantiates the need to manage the financial security of agro-industrial enterprises at the present stage of socio-economic development of Ukraine. The practical significance of the obtained results is determined by the fact that the conclusions and proposals can be used in the formation of the financial security strategy of the agricultural sector and the development of a mechanism for its implementation.

Aim

The purpose of the article is to reveal the specifics of financial support for the agricultural industry, to conduct a systematic analysis of the positive and negative trends that further affect the efficiency of agricultural production

Tasks

analysis of financial performance of leading Ukrainian agricultural corporations; assessment of the dynamics of capital investment as one of the sources of financial security; comprehensive assessment of financial support for the agricultural sector of the economy.

Materials and methods

The methodological basis of the article is general scientific and special methods of research, in particular: economic and statistical - to evaluate the dynamics of financial support of the agricultural sector; analysis and synthesis - to find out the reasons that cause changes in the volume of financial security; tabular and graphical - to represent the results of the study; abstract-logical - in the implementation of theoretical and methodological generalizations.

Results

Today, financial security of the agrarian sector in Ukraine is carried out mainly through a set of programs, each of which aims to increase the efficiency of production and profitability of the commodity producer. At the same time, due to the lack of funds of the State budget of Ukraine, this support is 80% administrated at the expense of favorable tax policy, is an indirect form of subsidies to the industry.

Analyzing the State budget of Ukraine for 2017-2018, it can be argued that under the pressure of external and internal factors adopted by the state budget for 2017, a relatively new mechanism for supporting the Agro-industrial complex was formed. Which significantly limited the effect of indirect financing and regulated the annual volume of state budget funds for support of agricultural commodity producers of at least 1% of production in the agro-industrial complex for 2017-2021.

The level of agricultural production in 2015 was taken as a basis and fixed at the level of 5 500 million UAH budgetary. This trend has been partly "inherited" by the 2018 state budget for 2018 for the Ministry of Agrarian Policy and Food, 12 456 million UAH was provided for expenditures, 94% of which were planned to be financed from the General Fund.

Most often, agricultural enterprises use bank credit as the fastest way to attract financial resources. However, high interest rates on the loan, short term of granting of the credit limit the use of this method by agrarian enterprises in the agrarian sector of the economy of Ukraine. For example, average interest rates on loans to agricultural enterprises ranged from 15.9% in 2010 to 24-26% in 2015, 17-22% in 2017, and 17-24% in 2018.

The study found that today, only operational activities of agricultural enterprises are counted, but there is a scarcity of resources to meet their production needs. (table1).

Table 1

Dynamics of credit ensuring of agrarian sector in Ukraine economy, 2014-2018 years

| Rate	Years					deviation 2018 y. to 2017 y.
	2014	2015	2016	2017	2018	
The number of entities that attracted loans, units	2267	2689	2801	3011	3041	30
Loans were given to the agricultural sector – total, billion UAH	10.9	23.4	31.5	40.3	43.5	3.2
Short –term	7.8	22.9	29	36.5	38.7	2.2
Mid-term	2	0.1	2.3	3.5	4.1	0.6
Long –term	1.1	0.4	0.2	0.3	0.7	0.4
Number of subjects that attracted preferential credits	-	439	347	382	403	21
Received concessional loans, million UAH	-	300	162.8	294.9	653.8	358.9
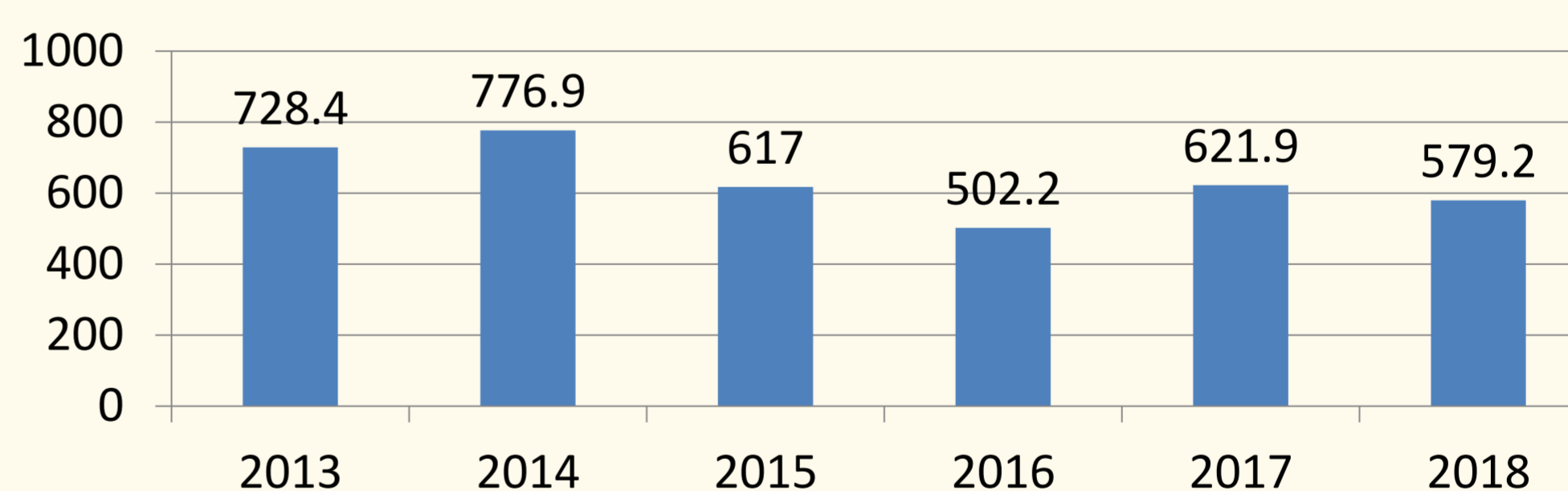
Fig. 1. Dynamics of foreign direct investment in the share capital of the agrarian sector of Ukraine, million dollars USA.

(Chart values: 2013: 728.4; 2014: 776.9; 2015: 617; 2016: 502.2; 2017: 621.9; 2018: 579.2)

In Ukraine, capital expenditures in 2018 amounted to 526342 million UAH, that is 138.9% more, than in 2014. Considering investments by individual types of economic activity, we see that the increase in the overall indicator is due to increased investments in agriculture, forestry and fisheries - by 250.6% and industry - by 108.4%, investments in transport, warehousing, postal and courier activities - by 181.7%.

In case of shortage of funds at domestic agrarian enterprises, in our opinion, it is expedient to attract foreign capital into the agricultural sector. Thus, the dynamics of foreign direct investment in the agrarian sector of Ukraine is presented in Fig. 1.

The data show a downward trend of accumulated foreign direct investment in the complex. At the same time, the share of such investments in the total amount of foreign direct investment in Ukraine remains during 2013-2018. A Miniserina - 1.7% of the total volume. The most direct foreign investment in the agricultural sector is directed to annual and two-year crops, livestock and agricultural support.

Conclusion

Conducting the study gives grounds to propose approaches to enhance financial security, in particular the introduction of effective financial management in the field of protection of the priority financial interests of the subjects of agrarian sphere, and in the management of its current activities; development and implementation of methodological support for financial security diagnostics with defined criteria, indicators and levels of its graduation; organization of constant monitoring of financial security; ensuring a high level of capitalization of agrarian business, including through the use of accounting and financial technologies that will help at the level of business entities to enhance financial security and increase investment attractiveness, and at the state level - to provide government statistics with reliable indicators of the activities of agricultural enterprises that will contribute to the effective implementation of agricultural, tax, customs and other policies.

Latvia University of Life Sciences and Technologies

ESAF
Ekonomikas un sabiedrības attīstības fakultāte

21th International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

National University of Life and Environmental Sciences of Ukraine

ARCHITECTONICS OF FINANCING OF AGRICULTURAL ENTERPRISES IN UKRAINE

Svitlana Boiko[1]PhD; Inna Demianenko[2]PhD; Halyna Skrypnyk[3]PhD; ValentynaYavorska[4]PhD
[1,2]National University of Food Technologies[3,4]National University of Life and Environmental Science of Ukraine, Kyiv, Ukraine

Abstract

The article analyzes thearchitectonics of financing of agricultural enterprises in Ukraine under the influence of macroeconomic factors and industry factors.
Conducting the study gives grounds to propose approaches to optimizing the structure of financial resources of agricultural enterprises in Ukraine with the determination of the priority of equity capital and long-term liabilities.

Aim

The purpose of the article is is the empirical assessment of the formation of architectonics of financing of agricultural enterprises in Ukraine under the influence of macroeconomic factors and industry factors.

Tasks

disclosure of scientific approaches to the formation of financial resources of agricultural enterprises of Ukraine; determination of the dynamics and structure of financing of agricultural enterprises in Ukraine.

Materials and methods

The methodological basis of the article is general scientific and special methods of research, which are based on modern scientific concepts of finance, economic and related sciences. The following methods were used in the study: monographic (comparing and detailing the data of architectonics of financing of agricultural enterprises in Ukraine); abstract-logical (used to formulate conclusions).

Results

Agriculture is one of the most important types of economic activity for the Ukrainian economy, since together with other related economic activities (processing industry, trade) it forms more than half of Ukraine's GDP. The share of agriculture in the production of goods and services in 2018 amounted to 10.85% compared to 9.42% in 2013, 7.55% in 2010. In such conditions, an important task of ensuring the sustainable development of agriculture is the financing of agricultural enterprises in compliance with both the principles of sufficiency and financial stability. Therefore, an important and urgent task is a retrospective study of the architectonics of financing of agricultural enterprises in Ukraine, the factors influencing it and the substantiation of the prospects for its optimization.

The financial resources of agricultural enterprises of Ukraine in the study period (2005-2018) increased by 6.5 times (Figure 1), which exceeds the growth rate of the total financial resources of enterprises in the economy (2.9 times) and in all other types of economic activity (transport, storage, postal and courier service – 3.4 times, industry – 2.9 times, building – 2.6 times, retailing and wholesaling – 2.6 times, financial and insurance activities – 1.8 times etc.).

The architectonics of financing of agricultural enterprises in Ukraine is determined by the composition and structure of financial resources with the determination of the share of equity, long-term and current liabilities (table 1).
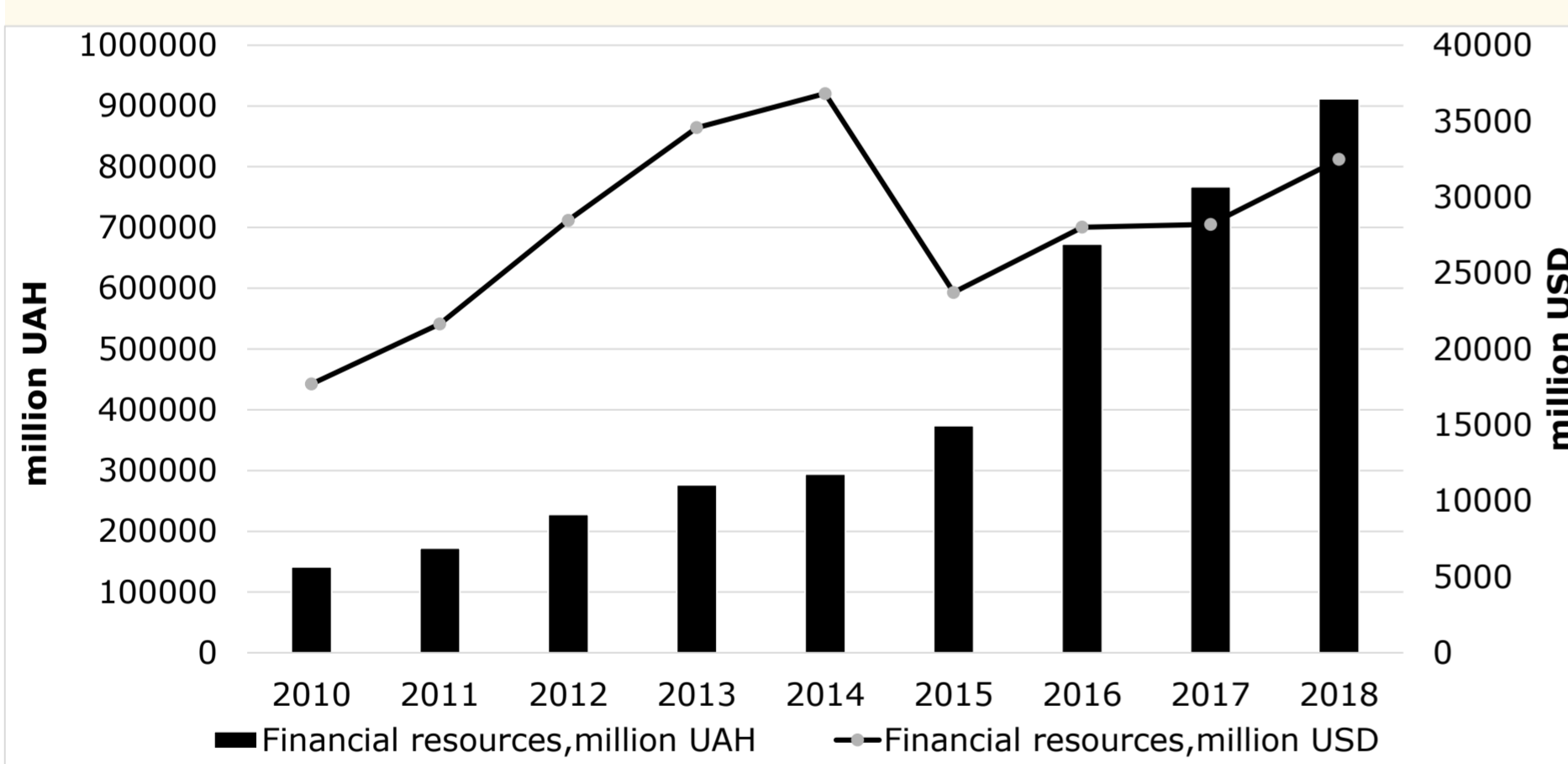

Fig. 1. Financial resources of agricultural enterprises of Ukraine, 2010-2018

Table 1
The structure of financing resources of agricultural enterprises of Ukraine, 2010-2018 %

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018
Equity capital	50.69	56.51	54.92	52.47	50.73	41.90	40.92	48.27	47.86
Borrowed capital, including	49.31	43.49	45.08	47.53	49.27	58.10	59.08	51.73	52.14
Long-term liabilities	15.25	14.29	13.11	12.76	13.40	15.90	9.37	7.58	6.48
Current liabilities	34.06	29.19	31.97	34.77	35.88	42.20	49.71	44.15	45.65
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Equity capital was the basis for the accumulation of financial resources of agricultural enterprises. The dynamics of equity of agricultural enterprises indicates an annual increase in its nominal size, but its growth rate ranged from 2.94% in 2014 to 75.64% in 2016, which indicates the heterogeneity of the dynamics of equity, which is mainly determined by the dynamics of retained earnings.

The empirical assessment of the financial support of the activities of agricultural enterprises of Ukraine in the context of agricultural development was carried out, and three periods were distinguished: 2010-2013 – an increase in the financial resources of agricultural enterprises in Ukraine subject to the predominance of equity, ensuring of the financial stability of enterprises, the violated state of payment discipline; 2014-2015 – reduction of financial resources of agricultural enterprises subject to the prevalence of borrowed funds, partial loss of financial stability of enterprises; 2016-2018 – an increase in the financial resources of agricultural enterprises in the direction of restoring the financial potential of the first period, partial loss of financial stability and a deterioration in the payment discipline of the resources of agricultural enterprises.

Conclusion

The results of the study of the state and dynamics of architectonics of financing of agricultural enterprises in Ukraine showed the presence of three periods: 2010-2013; 2014-2015; 2016-2018.
The architectonics of financial resources of agricultural enterprises of Ukraine indicates the presence of structural changes that are manifested in a decrease in the potential of agricultural enterprises in the long term.
Conducting the study gives grounds to propose approaches to optimizing the structure of financial resources of agricultural enterprises in Ukraine with the determination of the priority of equity capital and long-term liabilities.

21ᵗʰ International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

EVALUATION OF VEHICLE TAXATION IN THE REPUBLIC OF LATVIA BY THE METHOD OF VARIANT OPTIMIZATION USING RELATIVE SINGLE INDEXES

Alexey Leontyev, Mg. oec., Galina Reshina, Dr. oec.
Baltic International Academy, Latvia; University of Latvia, Latvia

Abstract

The European Commission has evaluated the consequences of the Latvian tax reform in 2018 and declared that the set target of decreasing tax burden for people with low income was not reached, yet the tax reform continuing implementation caused even greater social stratification.

To analyse the current situation in Latvia and show possible ways of improving it, scenario analysis (three controlling cases) and mathematical modelling by using the developed method were carried out.

Overall the developed method allows to analyse and forecast most of the changes in vehicle taxation.

Aim

The goal of the study was to develop method for determining the rational tax on vehicles based on criteria of fairness and efficiency using an analytical approach.

Tasks

The following tasks were set: to analyse normative enactments and scientific literature; to create relative single indicators of fairness and efficiency; to carry out a graph-analytical analysis; to develop recommendations.

Materials and methods

- analysis of primary and secondary data – this part involves gathering and transformation of real data to relative fuel equivalent values;
- mathematical modelling – used for describing a potential transitional situation;
- scenario analysis – analysis of current situation and several possible future situations, that could be achieved by introducing some changes to the existing tax system;
- relative single indexes approach – unique method, used for mathematical calculations with criteria, herein fairness and efficiency.

Results

Before carrying out variant optimization, it is necessary to determine the numerical values of relative single indexes that characterize the "fairness" and "efficiency" of the tax policy for each specific case and time period.

It is advisable to determine the numerical values of relative single indexes using this scheme:

$$K_{ij} = {P_{ij}}/{P_{i,bl}} \ or \ K_{ij} = {P_{i,bl}}/{P_{ij}}$$
$$i = \overline{1,N}; j = \overline{1,M}$$

where:

- K_{ij} – relative designation of relative single index;
- P_{ij} – value of single index of researched characteristic (equity or efficiency);
- $P_{i,bl}$ – value of single index taken as basic (possible) level;
- i – name of the estimated characteristic;
- j – no. of variant;
- N – the number of relative single indexes;
- M – the number of researched variants.

Fig. 2. **Combined diagram of relative single indexes of fairness and efficiency (the second controlling case is the only solution)**
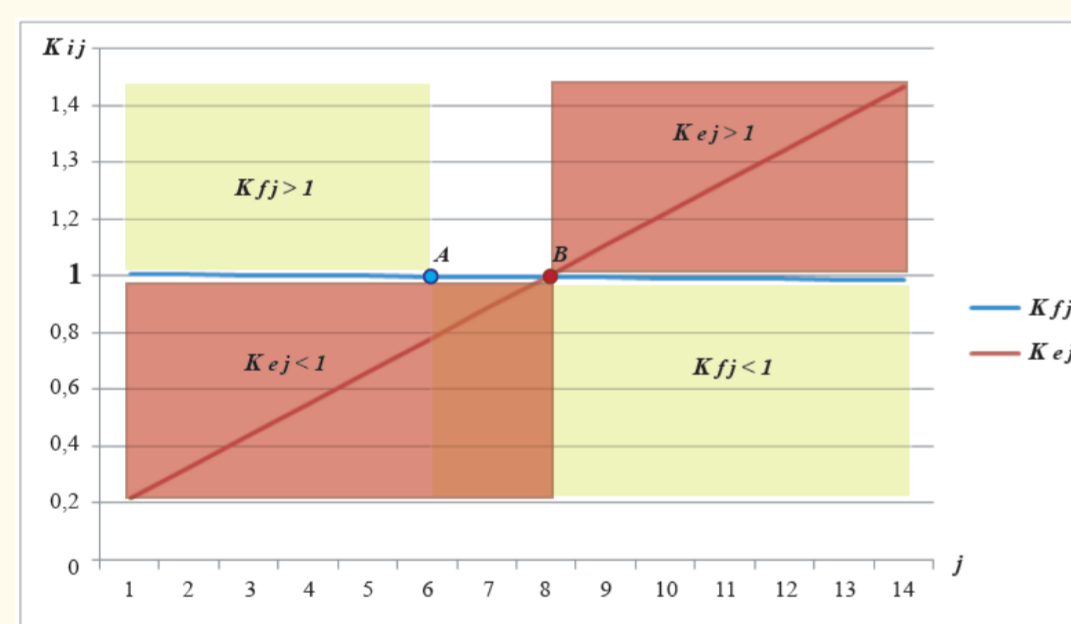

Fig. 1. **Combined diagram of relative single indexes of fairness and efficiency (the first controlling case is incompatibility of requirements)**
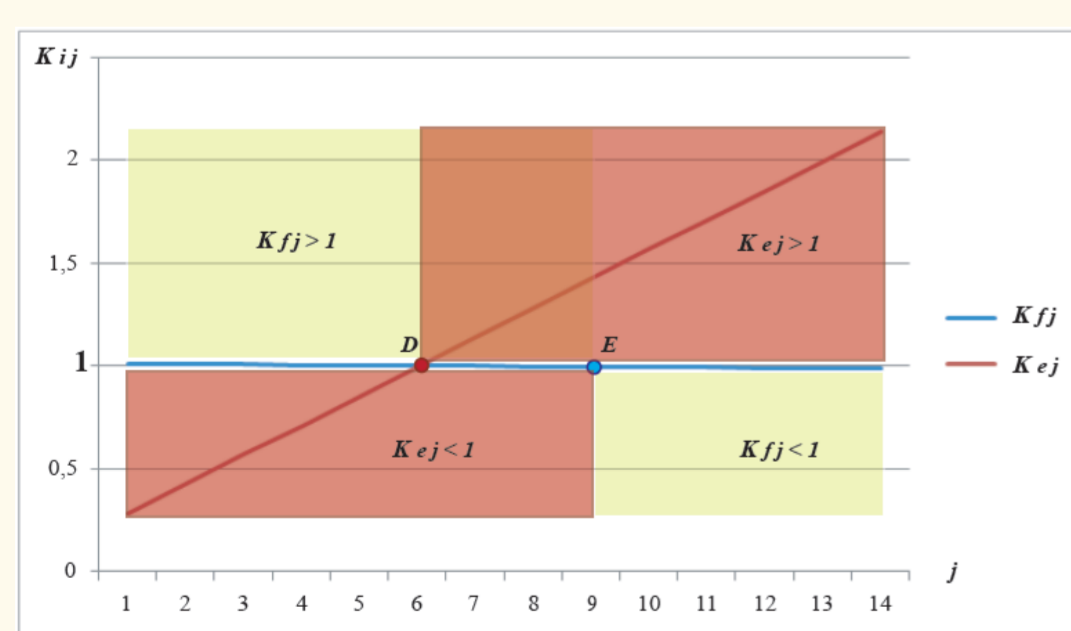

Fig. 3. **Combined diagram of relative single indexes of fairness and efficiency (the third controlling case is a set of possible solutions)**
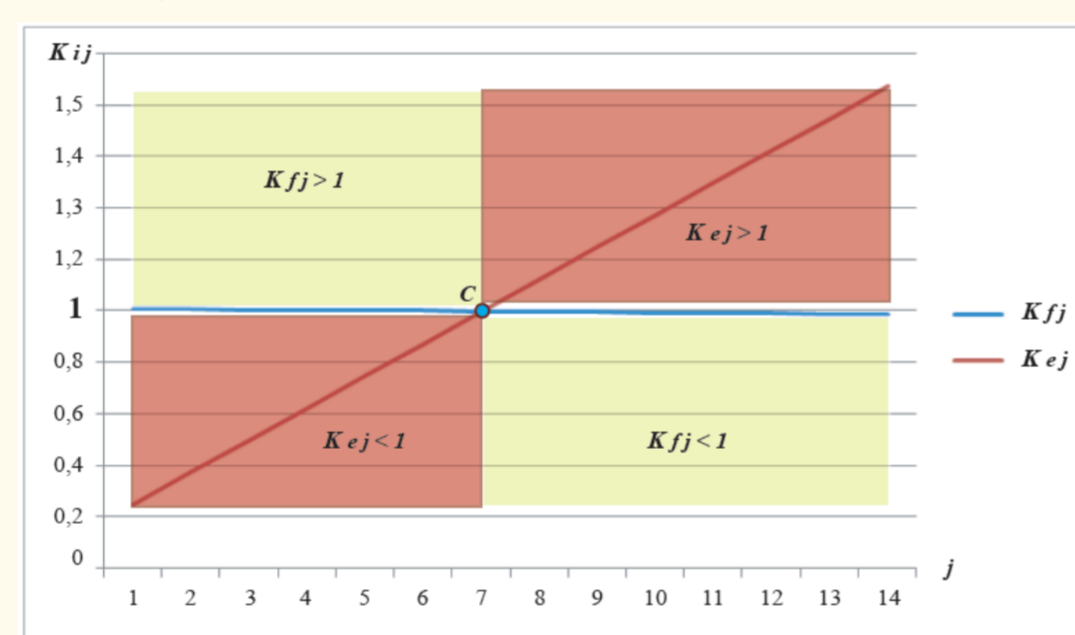
In all cases, when determining the values of relative single indexes from the formula, the one that corresponds to the improvement of the quality of the index system with an increase in the single index is selected.

When determining the optimal values of the vehicle operation tax from the point of view of the "efficiency" criterion of taxation, it is advisable to assign $P_{i,bl}$ values after calculations made according to the CSDD data on the number and types of registered vehicles, taking into account the forecast of the dynamics of their change. Further, depending on the required share of funds received in the budget for the implementation of this tax, it is necessary to distribute the tax burden for specific types of transport, which will allow to select the necessary $P_{i,bl}$ value.

Relative single indexes of "fairness" K_{fj} and "efficiency" K_{ej} are formed in such a way that their values, which lie in the range of values less than one, reflect an unacceptable value of quality (their characteristics), and acceptable values of indexes K_{ij} are equal to or exceed one. In this study, the calculations were based on the conditional fuel equivalent, i.e. the maximum amount of fuel that can be purchased for an average salary in Latvia.

Table 1
Determination of relative single indexes of fairness and efficiency (first controlling case)

No. of variant	1	...	5	6	7	8	9	10	11	...	13	14
P_{fj}	610	...	606	605	604	603	602	601	600	...	598	597
$P_{f,bl}$					605							
K_{fj}	1.008	...	1.002	1.000	0.998	0.997	0.995	0.993	0.992	...	0.989	0.987
P_{ej}	2	...	6	7	8	9	10	11	12	...	14	15
$P_{e,bl}$					9							
K_{ej}	0.222	...	0.667	0.778	0.889	1.000	1.111	1.222	1.333	...	1.556	1.667

Table 2
Determination of relative single indexes of fairness and efficiency (second controlling case)

No. of variant	1	...	6	7	8	9	10	11	12	13	14
P_{fj}	610	...	605	604	603	602	601	600	599	598	597
$P_{f,bl}$					604						
K_{fj}	1.010	...	1.002	1.000	0.999	0.997	0.995	0.993	0.992	0.990	0.998
P_{ej}	2	...	7	8	9	10	11	12	13	14	15
$P_{e,bl}$					8						
K_{ej}	0.250	...	0.875	1.000	1.125	1.250	1.375	1.500	1.625	1.750	1.875

Table 3
Determination of relative single indexes of fairness and efficiency (third controlling case)

No. of variant	1	...	4	5	6	7	8	9	10	...	14
$P_{f,bl}$	610	...	607	606	605	604	603	602	601	...	597
K_{fj}					602						
P_{ej}	1.013	...	1.008	1.007	1.005	1.003	1.002	1.000	0.998	...	0.992
$P_{e,bl}$	2	...	5	6	7	8	9	10	11	...	15
K_{ej}					7						
P_{fj}	0.286	...	0.714	0.857	1.000	1.143	1.286	1.429	1.571	...	2.143

Conclusion

The analysis of the controlling cases, acquired by the usage of the method of variant optimization using relative single indexes showed that:

1. In the first controlling case (*table 1, fig. 1*) the tax policy efficiency is incomparable with fairness criterion, so it eventually leads to loss of budget revenues and at the same time stimulates impoverishment of the population.
2. In the second controlling case (*table 2, fig. 2*) there is only one optimal point, that complies with the criteria of fairness and efficiency. It should be used by state authorities to set appropriate taxes and adjust tax policy.
3. In the third controlling case (*table 3, fig. 3*) there is the area of optimal combination of fairness and efficiency. The government has wide amount of options of possible tax rates, that could be used to adjust tax policy and be a reference to a long-term planning.

Latvia University of Life Sciences and Technologies

ESAF
Ekonomikas un sabiedrības attīstības fakultāte

TASHKENT INSTITUTE OF FINANCE
TMI

21th International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

Agricultural investments as the main factor increasing the agricultural sector's competitiveness

Dr. Raimjanova Madina Asrarovna, assoc. prof. of the
Department of "Valuation and investment", Tashkent Institute of Finance

Abstract

In the article author analysis the importance of investments into agricultural sector of economy of Uzbekistan. The subject of the research is relations between volume of investments directed into Agricultural sector of the Uzbekistan's economy and measuring its impact to agricultural output in terms of volume of production, food production index and value added indexes.

Aim

To measure the result of investment on agricultural development and how it impacts the sector's competitiveness

Tasks

To study, compare and analyze the relationship between investment in agriculture and gross agricultural product, food production and value added in agriculture.

Materials and methods

This research uses methods of economic and mathematical modeling. Also author uses comparative models based on statistics database.

Results

Using methods of economic and mathematical modeling and analyzing trends in Agricultural sector development in Uzbekistan author makes conclusions :
1. There is strong correlation between volume of the agricultural investments and its impact to production volume, food production index and value added index.
2. Developed mathematical models demonstrate how investments will quantitively impact grows of production volume, food production and value added indexes allow to forecast them depending on volume of investment
3. Investments into Agricultural sector of Uzbekistan are valuable because of it leads to increase of Agricultural production in general and food production particularly, and more value added produce
4. Agricultural sector of Uzbekistan is competitive to invest for both local and foreign direct investors

Table 1

The impact of investment on agricultural development

Years	Investments in Ag sector, bln.UZS	Ag gross output, bln.UZS	Agriculture, value added, bln.UZS	Food production index, %
2002	102,2	3255,3	2244,2	85,37
2003	98,5	4083,3	2801,8	89,75
2004	113,6	4615,8	3242,3	93,98
2005	138,2	5978,3	4192,8	97,92
2006	164,4	7538,8	5298,0	108,1
2007	200,9	9304,9	6550,2	108,79
2008	261,2	11310,7	7673,0	114,17
2009	385,9	13628,6	9200,0	120,13
2010	531	30856,7	21251,3	126,53
2011	942,5	45285,9	30658,6	135,28
2012	1089,2	55750	36954,6	141,03
2013	1335,6	66435,3	42636,8	151,35
2014	1448	81794,3	53613,2	147,42
2015	1375,5	99604,6	64680,3	159,6
2016	1646,4	115599,2	74779,0	157,08
2017	2004,3	148199,3	90983,9	N/A
2018	3561,1	192699,2	117315,8	N/A

Ag gross output, bln.UZS

$y = -0{,}0049x^2 + 75{,}379x - 7518{,}3$
$R^2 = 0{,}9654$
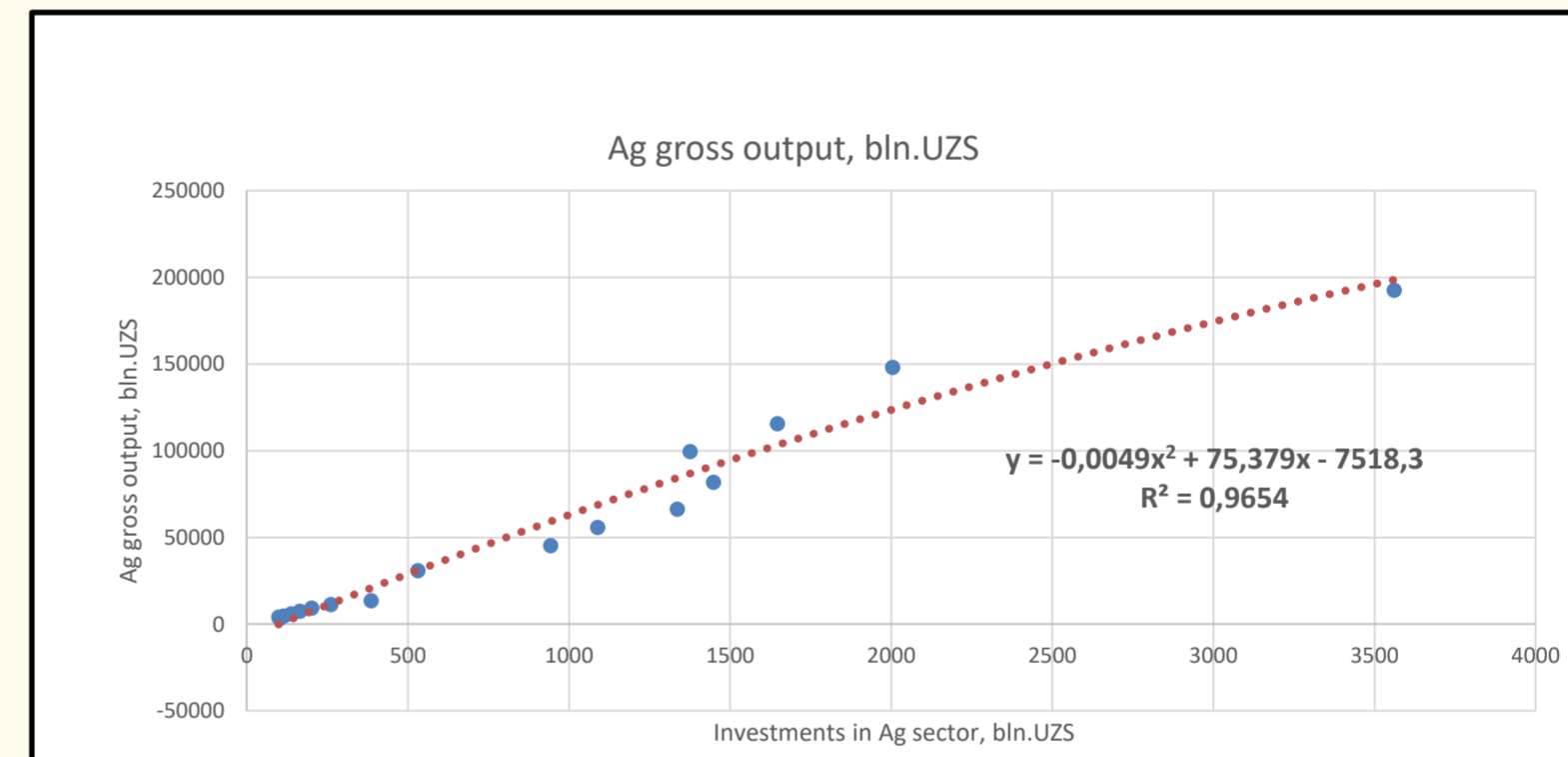
Figure.1. **The economic model gross output of agriculture**

Food production index, %

$y = 22{.}915\ln(x) - 15{.}098$
$R^2 = 0{.}9713$
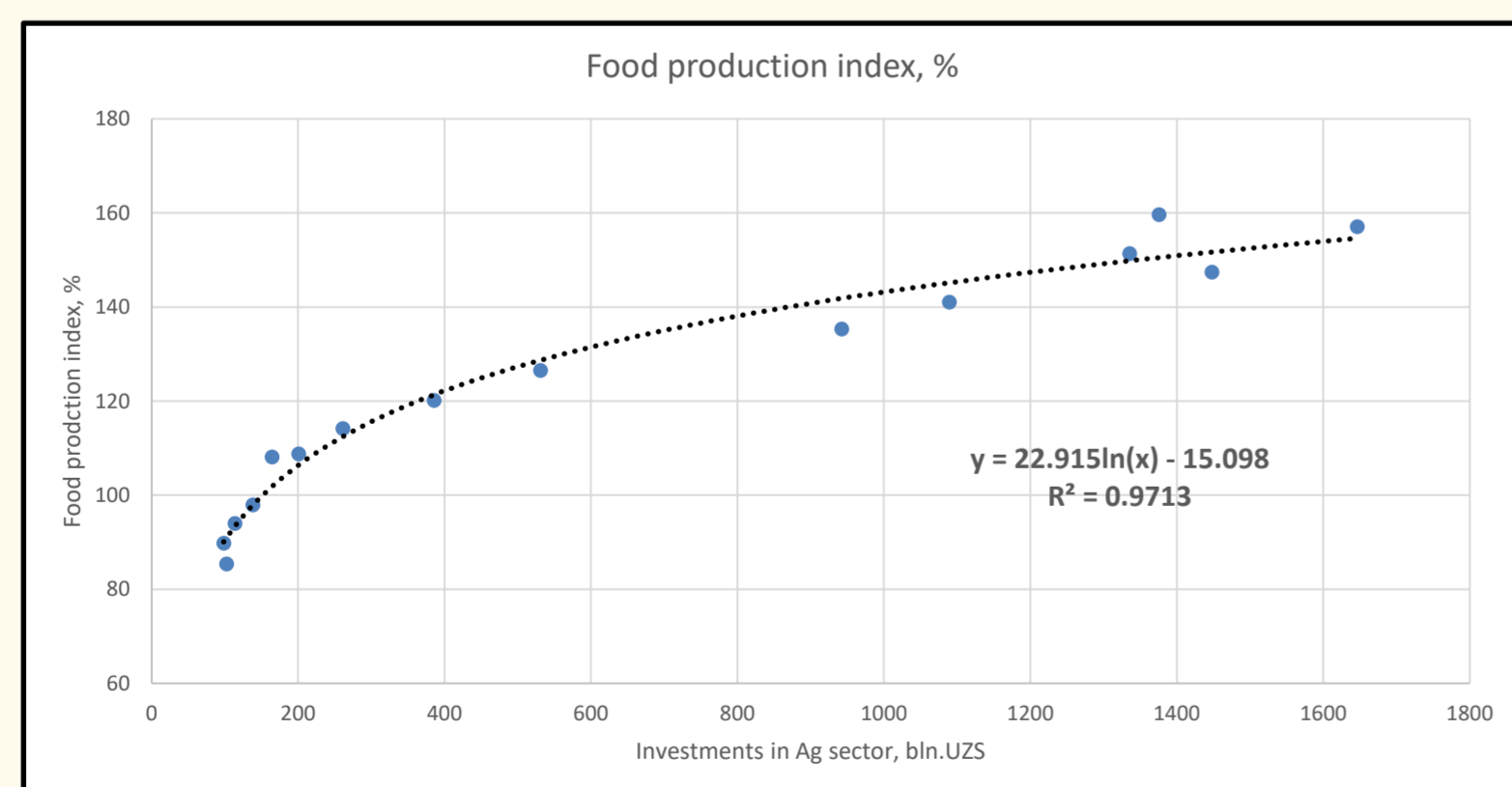
Figure.2. **Economic model food production Index**

Agriculture, value added, bln.UZS

$y = 15{.}855x1{.}1179$
$R^2 = 0{.}9862$
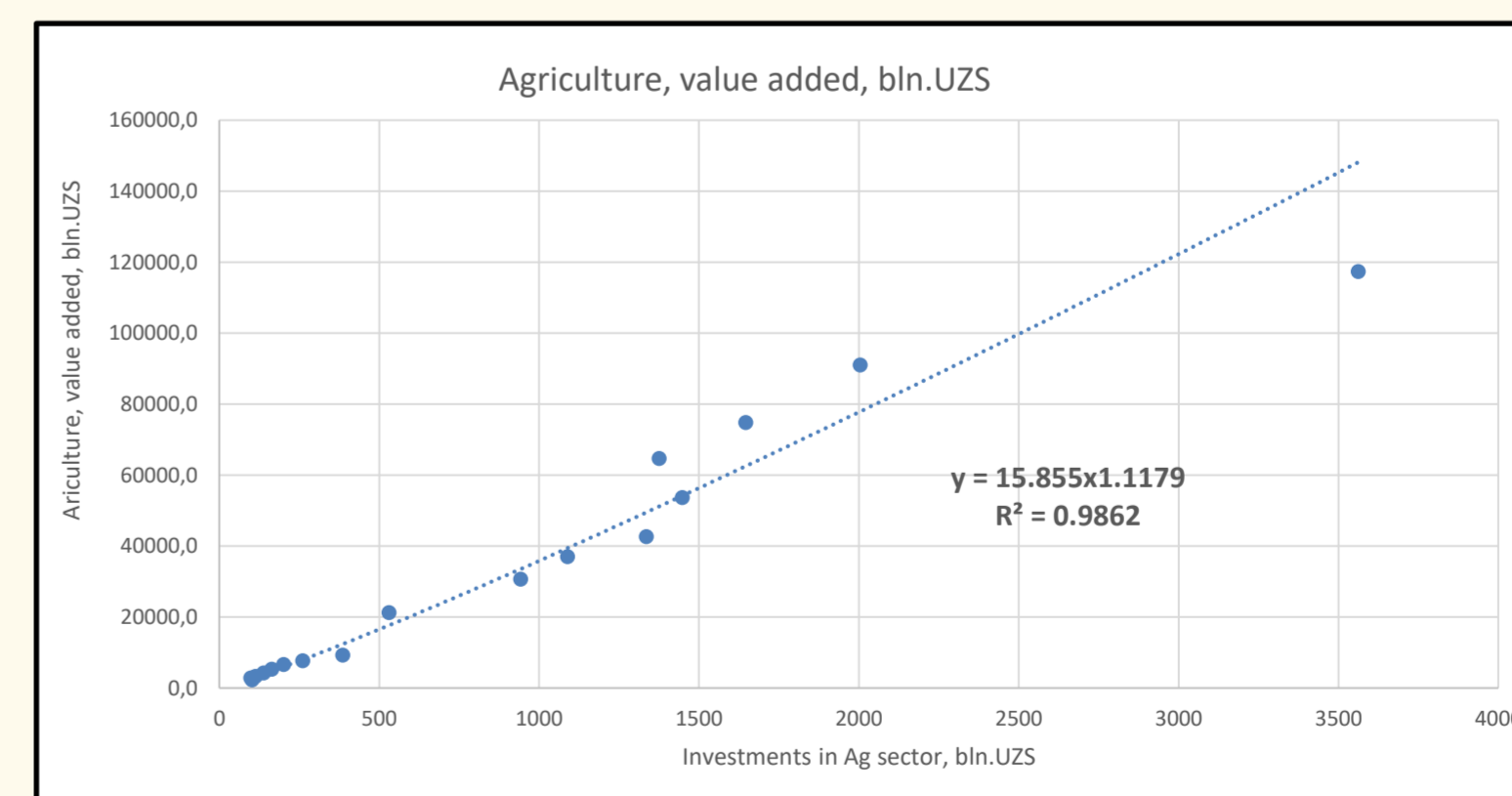
Figure 3. **Economic Model Value Added in Agriculture**

Conclusion

1. The research indicates that direct investments directed into Agricultural sector of Uzbekistan are valuable and profitable at macroeconomic level
2. There is need for further research to be focused on microeconomical level to identify the most attractive projects to be invested – high density orchards, greenhouses , processing plants etc.

Acknowledgements

21st International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

FINANCIAL SPECULATION IMPACT ON AGRICULTURAL COMMODITY PRICE VOLATILITY: TGARCH APPROACH

Algirdas Justinas Staugaitis
Vytautas Magnus University

Abstract

Motivated by agricultural commodity price fluctuations and spikes in the last decade, we investigate whether financial speculation destabilizes the price of agricultural commodities. We propose a model with seasonal dummy variables to measure if financial speculation impact on price volatility differs among seasons. The results of our research indicate that financial speculation as an exogenous factor has either no effect or reduces the volatility of the underlying futures prices. Therefore, we conclude that the increase of non-commercial market participants does not make the agricultural commodity prices more volatile or this link is at least questionable.

Aim

The aim of this research is to assess the impact of financial speculation on agricultural commodity price volatility.

Tasks

We first describe the methodology to measure the price volatility and financial speculation, then we analyse the underlying impact of financial speculation on futures price volatility and its clustering.

Materials and methods

In our study we use weekly returns on wheat, soybean and corn futures traded in Chicago Mercantile of Exchange. We apply threshold generalized autoregressive conditional heteroskedasticity (TGARCH) technique. To measure financial speculation in agricultural commodity markets we apply Working T index of excess speculation:

$$T_t = \begin{cases} 1 + \dfrac{SS_t}{HL_t + HS_t} & \text{if}(HS_t \geq HL_t), \\ 1 + \dfrac{SL_t}{HL_t + HS_t} & \text{if}(HL_t > HS_t). \end{cases} \qquad (1)$$

where: T_t is working T index for financial speculation, SS_t and SL_t are non-commercial short/long positions, HS_t and HL_t are commercial short/long positions, t is time period.

Next, we provide TGARCH mean (2) and variance (3) equations:

$$R_t = \alpha_0 + \alpha_1 R_{t-1} + u_t \qquad (2)$$

$$h_t^2 = \beta_0 + \beta_1 u_{t-1}^2 + \beta_2 h_{t-1}^2 + \beta_3 u_{t-1}^2 d_{t-1} + \beta_4 T_{t-1} + \beta_5 D_{t-1} + \beta_6 T_{t-1} D_{t-1} \qquad (3)$$

where: the mean equation consists of futures returns R_t as an autoregressive process with parameters α and an error term u_t with a variance of h_t. In the variance equation u_{t-1}^2 is the residual (ARCH) effect, h_{t-1}^2 is the variance (GARCH) effect, d_{t-1} is the dummy variable for asymmetry (1 if $u_{t-1} < 0$ and 0 otherwise). We also add external variables: T_{t-1} is the speculation index, D_{t-1} is the season effect (1 if the season is spring and 0 otherwise).

Results

We start our analysis by providing statistics for wheat, corn and soybean futures from Chicago Mercantile of Exchange (Figure 1). We split our time series into two subsamples covering, respectively, 1986–2002 (n=698) and 2003–2019 (n=865). The volatility of futures returns described by standard deviance is larger in the time period of 2003–2019 for all three agricultural commodities. Jacque-Bera test results meet the significance criteria of q-value <0.05 and thus show that sample data have the skewness and kurtosis matching a normal distribution. In order to test the hypothesis for data stationarity, we apply the augmented Dickey Fuller (ADF) Test. Time series are stationary in all cases, except for speculation index of wheat in 2003–2019. The results confirm that further ARCH technique is appropriate for modelling volatility of selected time series.
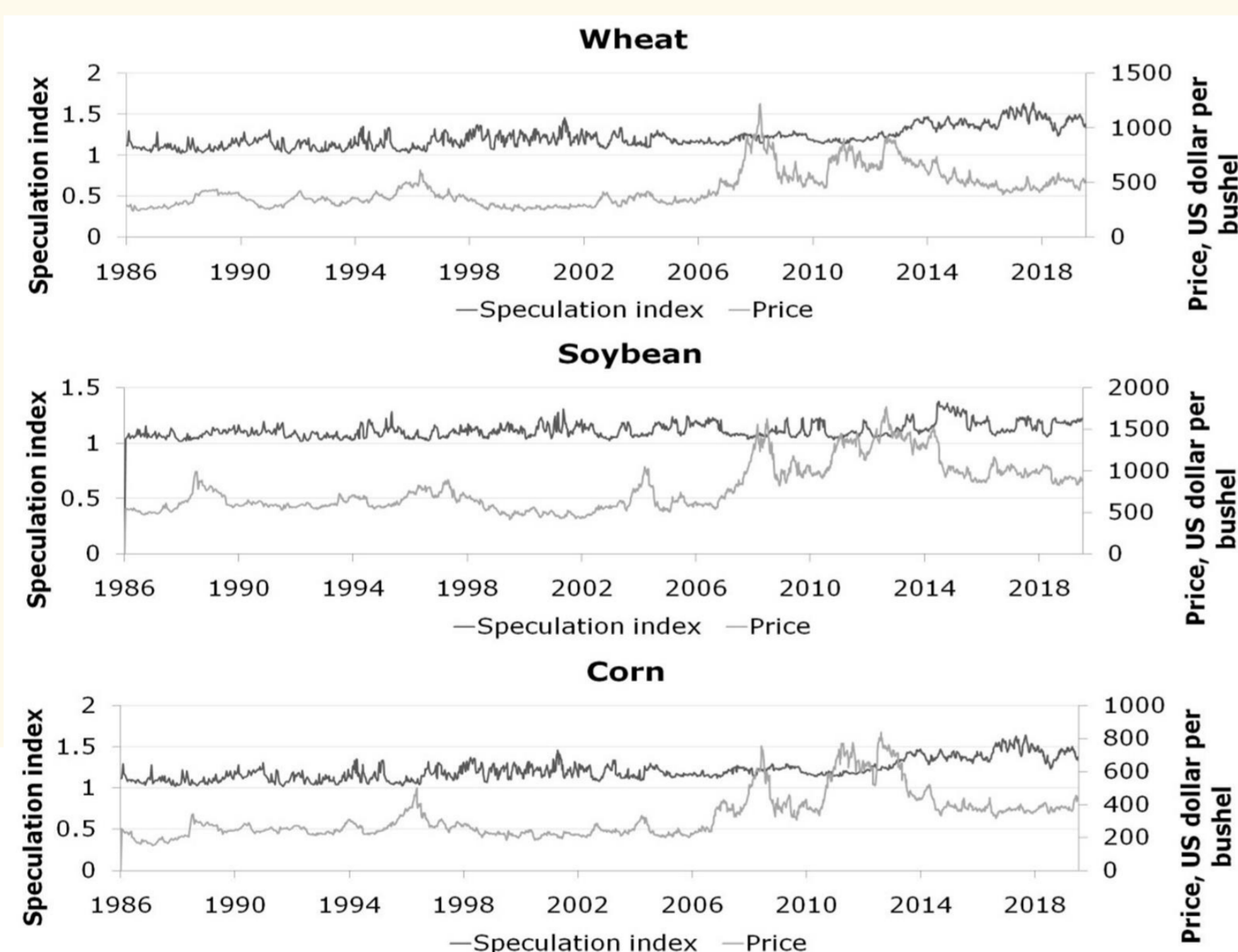
Next, Table 1 shows the results of our proposed modified TGARCH model that includes the product of seasonal dummy variable and financial speculation. The residual (ARCH) and volatility (GARCH) effects are present in all three commodity futures during 1986–2019. This indicates volatility clustering. The asymmetry between returns and volatility is only present and negative in soybean and wheat futures. Negative estimate for asymmetry means that a positive return increases volatility at a greater extent than a same size negative return. The product of financial speculation and seasonal dummy variable has a statistically significant and negative effect on volatility in wheat (-5.4768 with p-value less than 0.01 in 1986–2002) and soybean (-1.9046 with p-value less than 0.01 in 1986–2019, -2.0884 with p-value less than 0.05 in 2003–2019). However, in case of wheat the non-multiple speculation effect was also significant but positive (1.2722 with p-value less than 0.01 in 1986–2002). This can indicate that an increase in non-commercial positions reduces the volatility during more volatile spring seasons.

Eventually, we are unable to find the destabilizing effect of financial speculation on underlying futures price volatility. Our study gives the following results: financial speculation as an exogenous factor either had no effect or reduced the volatility or increased the volatility only in time period before 2003. The further investigation on financial speculation impact on price volatility can be expanded by using months instead of seasons, more detailed time periods, also involve more commodity futures.

Source: author's calculations based on Chicago Mercantile Exchange data, 2019

Fig. 1. **Prices and speculation index for wheat, soybean and corn futures (January 1986–July 2019)**

Table 1

Proposed TGARCH model estimates for agricultural commodity returns

Period	Wheat			Soybean			Corn		
	1986-2019	1986-2002	2003-2019	1986-2019	1986-2002	2003-2019	1986-2019	1986-2002	2003-2019
Mean Equation									
constant	-0.0006	-0.0692	0.0499	0.1474**	0.0812	0.1620	0.1689**	0.1289	0.2088*
Return	-0.0277	-0.0280	-0.0207	-0.0235	-0.0375	0.0002	-0.0500*	-0.0074	-0.0606*
Variance Equation									
constant	-0.3498	-1.2307*	1.0732	-0.4197	-0.4989	-0.7707	-0.2379	-1.0537	1.1668
Residual	0.0390**	0.0159	0.0622	0.0399**	0.0402**	0.0297*	0.0421**	0.0356**	0.0393**
Volatility	0.9537**	0.9496**	0.9160**	0.9644**	0.9556**	0.9779**	0.9601**	0.9571**	0.9539**
Asymmetry	-0.4445*	-0.6814	-0.4675*	-0.5972**	-0.4869*	-0.9071*	-2.2576	-0.4237*	0.0892
Speculation index	0.3362	1.2722**	-0.4670	0.2838	0.3924	0.5597	0.0520	0.8344	-1.0102
Spring	2.2654*	7.3280**	-1.2809	2.7780**	3.2436	2.8739**	2.3437**	5.4632**	0.7818
Speculation * Spring	-1.2763	-5.4768**	1.4042	-1.9046**	-0.2121	-2.0884*	-1.0347	-3.7467	0.2074

Notes: Estimates with p-value less than 0.05 are flagged with one asterisk (*), with p-value less than 0.01 are flagged with two asterisks (**).

Source: author's calculations based on Chicago Mercantile Exchange data, 2019

Conclusion

1. The results from analysis show that time series are stationary and include volatility clustering, thus further modelling of exogenous variables using ARCH techniques is available. In our research we also indicate that futures prices are more volatile during spring as compared to other seasons.
2. Our proposed threshold autoregressive conditional heteroskedasticity (TGARCH) model with financial speculation as multiple factor with seasonality shows that speculation impact on volatility is present in soybean and wheat (before 2003) futures but is negative.
3. The results of our research have important policy implications. Financial speculation is a concern for regulators of futures commodity exchanges to apply a limit on non-commercial positions. Our analysis similarly to other authors indicates that the influence of financial speculation on price level and price volatility in the agricultural markets is at least questionable. On contrary, we provide evidence that non-commercial positions can make the price more stable or reduce the volatility during more volatile spring periods.

21st International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

PROTECTION OF EMPLOYEES IN INSOLVENCY PROCEEDINGS

Laila Kelmere, PhD student/lecturer
Latvia University of Life Sciences and Technologies

Abstract

The issue of the protection of workers' rights is one of the most important aspects in situations where the employer is declared insolvent. The country can develop its own employee protection system in case of company's insolvency. Based on the statistical data for the period 2003–2019, the author analyses the situation in Latvia. Two ways of protecting the rights of employees or satisfying claims are distinguished: a privilege system and a guarantee system. The model chosen by Latvia is financially successful.

Aim

To analyse the existing employee protection mechanism in Latvia, which the State implements with the help of state entrepreneurial risk fee.

Tasks

To analyse (1) the ways in which employees' claims are met; (2) the size of the state entrepreneurial risk fee and the amount of revenue in the State budget; (3) the revenues and costs of the employee claims guarantee fund.
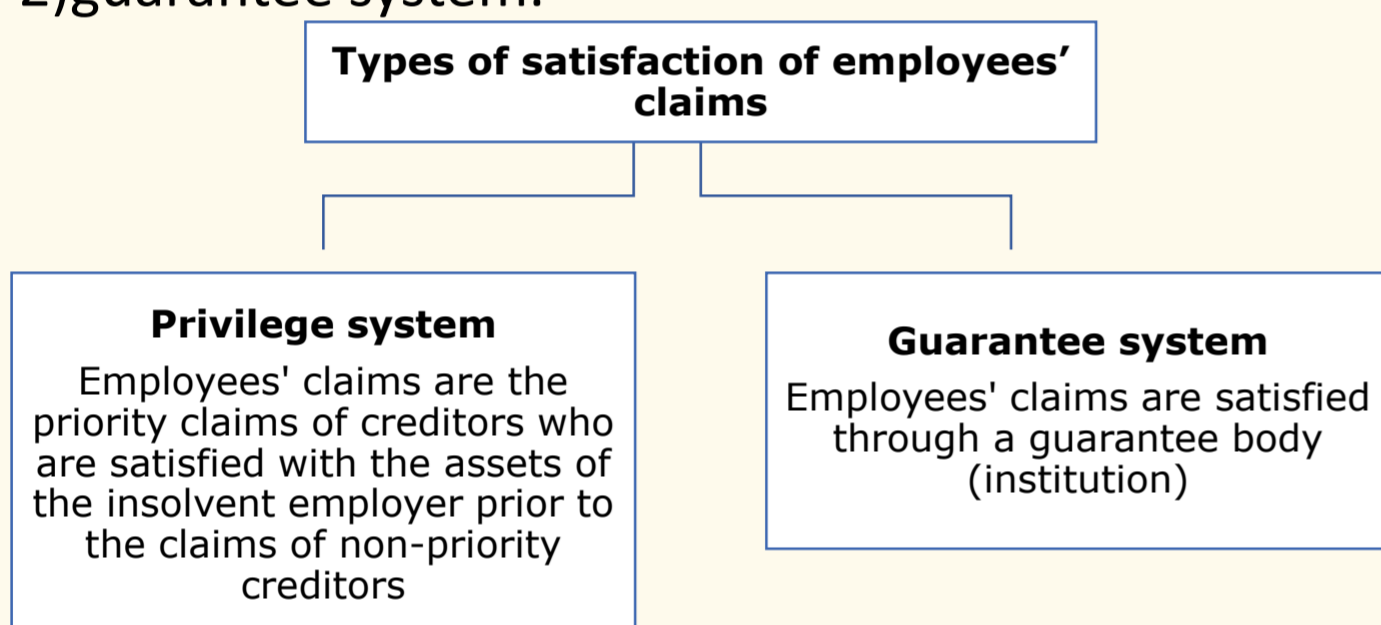
Materials and methods

The monographic method – in examining, assessing and analysing literature and legal enactments, statistical methods; logical analysis and synthesis. The graphic method was employed to show the relationships identified and their nature and form. The logical construction method.

Results

Two ways of protecting the rights of employees or satisfying claims are distinguished:
1) privilege system;
2) guarantee system.

Types of satisfaction of employees' claims

Privilege system
Employees' claims are the priority claims of creditors who are satisfied with the assets of the insolvent employer prior to the claims of non-priority creditors

Guarantee system
Employees' claims are satisfied through a guarantee body (institution)

Source: author's construction based on Budget and Finance (Taxation) Committee, 2000
Fig.1. **Types of satisfaction of employees' claims**

Until Latvia's accession to the EU, Latvia used a system of privileges to satisfy employees' claims in the event of insolvency.

The EU, by Council Directive 80/987/EEC, required EU Member States to provide for the protection of employees in the event of the insolvency of their employer, in particular in order to guarantee that their claims are satisfied in respect of remuneration. consideration of the need to balance economic and social development in the Community. This was one of the reasons why the Law "On Protection of Employees in case of Insolvency of Employer" was drafted and the guarantee system chosen. And since 2003 companies are also obliged to pay the State entrepreneurial risk fee.

Table 1
State entrepreneurial risk fee amount in Latvia, 2003–2019

Period, year	Amount of the risk fee during the reporting month for each employee, EUR	Chain growth rate, %
2003	1.07	-
2004	0.50	-53.3%
2005	0.50	0%
2006	0.36	-28.0%
2007-2019	0.36	0%

Source: author's calculations based on Cabinet of Ministers Regulations, 2002-2018

Latvia chose the model of setting up an employee guarantee fund in which the employer makes contributions and as shown in the figure, initially the amount of the fee was more than 1 EUR per employee (Table 1).

Data for the share of the State entrepreneurial risk fee to be transferred to the employee claims guarantee fund in Latvia compiled in Table 2.

Table 2
The share of the State entrepreneurial risk fee to be transferred to the employee claims guarantee fund in Latvia, 2003-2019

Period, year	Amount to be transferred to the employee claims guarantee fund in% or EUR of the total amount of revenue from the State fee	Amount in EUR	Chain growth rate, %
2003	75%	5 788 540.25	-
2004	52%	2 471 975.50	-57.30%
2005	43%	1 889 881.56	-23.55%
2006	86 194.73 €	86 194.73	-95.44%
2007	303 467.25 €	303 467.25	252.07%
2008	548 815.89 €	548 815.89	80.85%
2009	53%	832 062.86	51.61%
2010	70%–89%	2 195 580.84	163.87%
2011	78%	2 195 284.89	-0.01%
2012	82%	2 368 407.12	7.89%
2013	85%	2 579 773.79	8.92%
2014	89%	2 726 824.80	5.70%
2015	92%	2 771 876.08	1.65%
2016	96%	2 807 069.08	1.27%
2017	68%–100%	2 584 004.56	-7.95%
2018	57%	1 809 562.14	-29.97%
2019	63.5%	2 110 503.59	16.63%

Source: author's calculations based on Cabinet of Ministers Regulations, 2002-2018, and on the author's special request of the data from Insolvency Control Service

The author concludes that at a time when the amount to be transferred to the employee claims guarantee fund was determined in % from collected fee, the contributions in an amount of EUR was higher than in those periods, such as 2006-2008, when the amount of the contribution was determined as a special amount in EUR.

For research purposes, in order for the author to confirm her view that the introduction of a risk charge is a successful solution which has undermined social tension and contributed to protecting employees in the event of insolvency of their employers, the Insolvency Control Service provided statistics, at the author's request, in an aggregated manner on the revenue and costs of the employee claims guarantee fund (Figure 2).
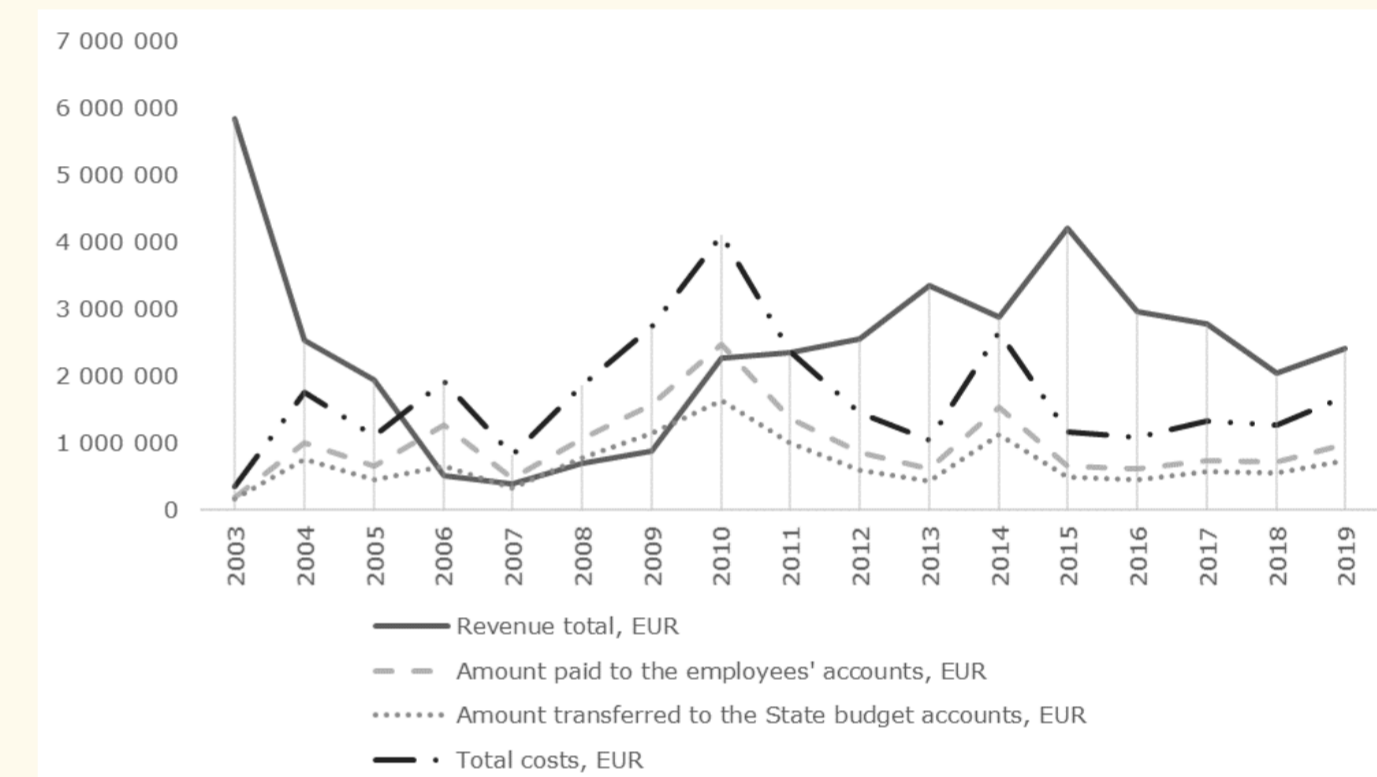
Source: author's calculations based on the author's special request of the data from Insolvency Control Service
Fig. 2. **Revenue and expenses of the employee claims guarantee fund, 2003-2019, EUR**

— Revenue total, EUR
— Amount paid to the employees' accounts, EUR
⋯ Amount transferred to the State budget accounts, EUR
—·— Total costs, EUR

Expenditure over revenue was exceeded by six years, during the period 2006-2011, which is explained by deliberate reductions in contributions and the effects of the financial crisis. The growing cost increases coincide with periods when the number of companies with limited liability liquidation has increased. The author has analysed and published the dynamic of insolvency and liquidation of limited liability companies in separate studies and papers. Until 2003, a system of privileges for the satisfaction of employees' claims was operational, but from 2003 the guarantee system began to operate, which significantly reduced the time during which a worker could receive a fee for his or her claim to the extent specified by law.

41% of the total costs of the employee claims guarantee fund was paid to the State budget accounts during the analysis period. These contributions are directly linked to workers and their social protection. By establishing a national tax instrument, the State entrepreneurial risk fee, the State acted as an insurer against uncollected tax payments and without creating an additional burden on the budget of providing financial resources to employees of insolvent companies

Conclusion

1. Since 2003, the companies in Latvia are obliged to pay the State entrepreneurial risk fee. It is the duty to calculate the State entrepreneurial risk fee of any employer who may be declared into insolvency proceedings in accordance with the Law on Insolvency.
2. Resources of the employee claims guarantee fund shall consist of: the part of the entrepreneurship risk State fee; gifts and donations and amounts recovered by insolvency administrators. From 2003 to 2019, 89% of the proceeds are part of the risk fee, 11% of the sums recovered by administrators, whereas gifts and donations that would have been transferred to the income of that fund are not included.
3. During the period 2003 to 2019, 34725 workers have been paid a total amount of EUR 28 709 067 out of the employee claims guarantee fund, including 58 % of that amount paid to the employees' accounts and 41 % transferred to the State budget accounts.
4. The author considers that the amount of the State entrepreneurial risk fee set in recent years at EUR 0.36 per employee per month is sufficient in the current economic situation in the country. Further investment of State entrepreneurial risk fee revenues in the employee claims guarantee fund should be pursued.

Social Sciences Research

We believe in
A KNOWLEDGE
BASED SOCIETY

Latvia University
of Life Sciences
and Technologies

ESAF
Ekonomikas un sabiedrības attīstības fakultāte

POLTAVA UNIVERSITY OF
ECONOMICS AND TRADE

21th International Scientific Conference
ECONOMIC SCIENCE FOR RURAL DEVELOPMENT 2020
12-15 May 2020, Jelgava, Latvia

MODERNIZATION OF THE MECHANISM FOR FINANCING RURAL DEVELOPMENT IN UKRAINE

Svitlana Yehorycheva, Doctor of Economics/Professor; **Tetiana Hudz**, Doctor of Economics/Associate Professor; **Mykola Lakhyzha**, Doctor of Public Administration/Professor

National University «Yuri Kondratyuk Poltava Polytechnic»; Poltava University of Economics and Trade; Institute for Personal Training of the State Employment Service of Ukraine

Abstract

The authors proposed to improve the mechanism for financing rural development by active use its budgetary, credit and investment instruments. The prevalence of budgetary funding, whose limitation constrained rural development, was proven. Modern approaches to financing rural development were stated based on broadening community involvement in local budgeting and attracting investment resources. The proposals for the use of PPP agreements and crowdfunding for financing rural development were provided.

Aim

The aim of the article is to systematize modern means of rural development financing in Ukraine and to identify problems of their application by local governments.

Tasks:
to find out the possibilities of financing rural development at the expense of local budgets; to identify areas for public initiative; to propose the ways for more active use of lending and investment instruments.

Materials and methods

The information base includes legal acts of Ukraine, statistical data of State Treasury Service of Ukraine, State Statistics Service of Ukraine, Ministry of Finance of Ukraine, Ministry for Development of Economy, Trade and Agriculture of Ukraine, Poltava Regional Council.
The systematic analysis was used to research the modernization of the mechanism for financing. The structural-functional method was used to study budget financing technologies. Comparative analysis was applied to determine the national specificity of rural financing.

Results

The article presents the author's vision of systemizing modern means for financing rural development, as opposed to the mechanism of state support for the agricultural sector. The main results of the study are concentrated in two areas:
1) budget methods of financing and their improvement;
2) credit and investment instruments of rural development financing.
Financial decentralization, which began in Ukraine in 2014-2015, was aimed at achieving self-sufficiency of territorial communities, their ability to meet both current demands and, most importantly, sustainable growth needs. Over the past five years, the own revenues of the general fund of the local budgets have quadrupled. Their development budgets, whose funds are channelled to investment projects, construction of the socio-cultural facilities and utilities etc., have been also increasing.

The mechanism for financing rural development is now being transformed through the implementation of the concept of participatory budgeting. In 2017, the Poltava Regional Council launched the first in Ukraine and even in Europe program "Participatory Budget" extended to the whole region. In 2019, the Poltava Regional Council initiated a school-based participatory budgeting.
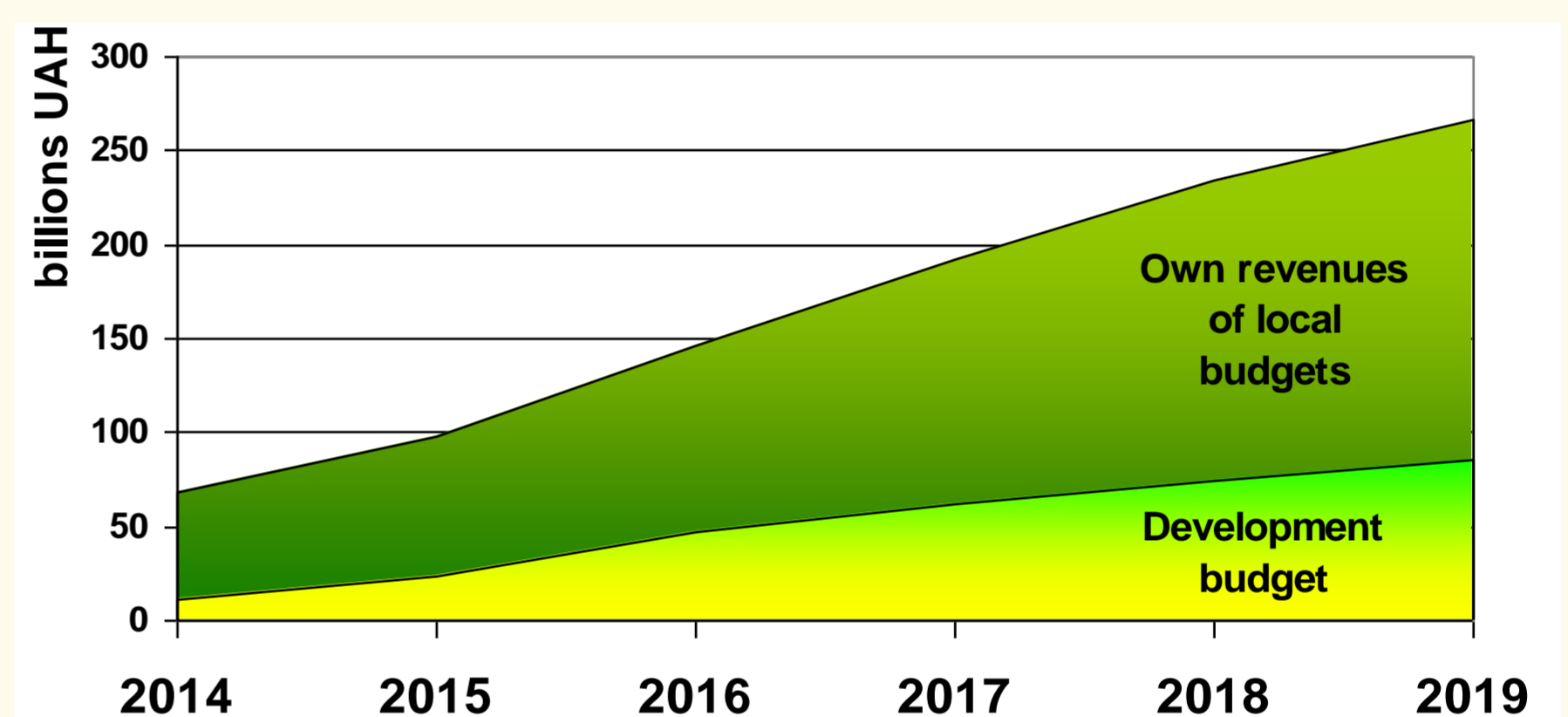

Fig. 1. **Dynamics of own revenues of local budgets and development budgets in Ukraine**

Table 1

Dynamics of government subsidies provided to local budgets for development purposes, UAH billions

Name of Subvention	2014	2015	2016	2017	2018	2019
Subvention for socio-economic development of certain territories	0,5	0,8	3.3	6.2	5,0	4.7
Subvention for the formation of ATC infrastructure	-	-	1.0	1.5	1.9	2.1
Subvention for the development of medicine in rural areas	-	-	-	4.0	5.0	5.0
Subvention for the construction of sports facilities	-	-	-	0.27	0.37	0.75
Subvention for construction, reconstruction, repair and maintenance of public roads of local importance	-	-	-	-	11.5	14.7

Source: authors' calculations based on (State Treasury Service..., 2020)

Fig. 2. **Methods and instruments for financing rural development in Ukraine**

But only at the expense of the own funds of the local budgets it is impossible to solve complex socio-economic problems of rural development. So, subventions from the state budget became one of the important instruments of its financing. Over the five years, the amount of local development subventions has increased by almost 55 times.

The integral part of the development budgets are local borrowings. However, only the city councils have become the borrowers. The lack of interest of amalgamated territorial communities (ATC) in attracting additional funds through local borrowing is due not so much to economic feasibility as to legal uncertainty that impedes rural development financing.
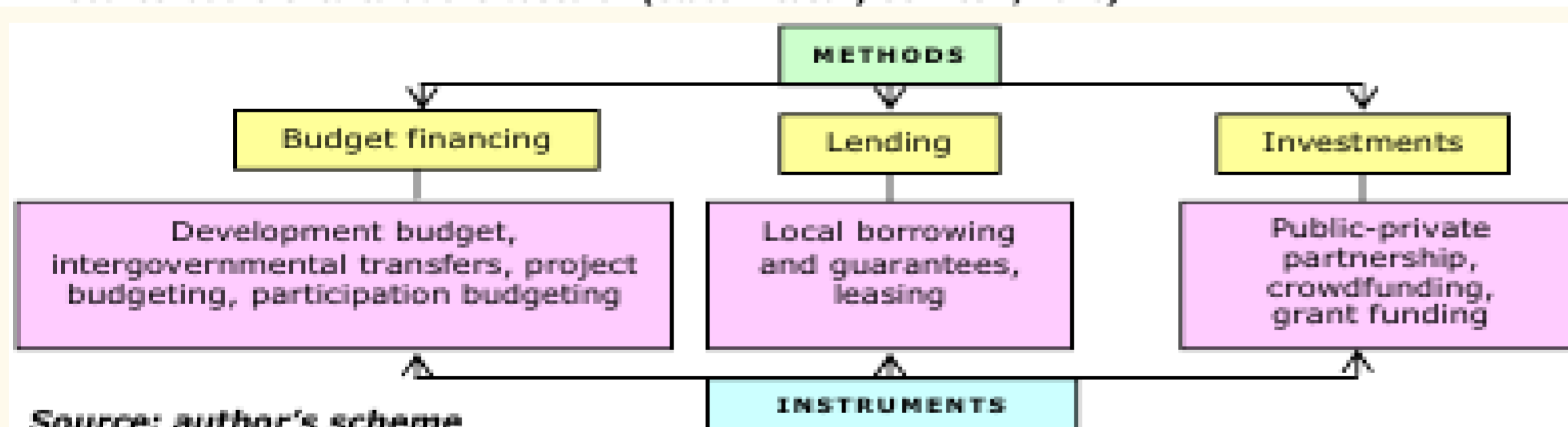
Leasing, whose market is actively developing in Ukraine, is gradually becoming a powerful funding source for the economic development of rural areas. The municipal enterprises have been entering the leasing market with the financial support of their founders - local governments, who are worried about renewing the fleet and equipment for the public utilities. However, there is still no such decisions taken by the ATC councils.

Local governments can also address rural development through the use of public-private partnership (PPP). However, the spread of PPP practices in Ukraine is constrained by both general economic problems and the weak awareness of territorial communities' management about PPP mechanisms, and the lack of relevant specialists.

Conclusion

1. The analysis of the mechanism of financing rural development in Ukraine has confirmed the existence of significant discrepancies between theory and practice. The identified problems - low efficiency of local self-government bodies, limited local budget resources to address rural development issues, low level of financial support of rural areas - have not been resolved for a long time.
2. The deepening of the decentralization process in Ukraine opens additional opportunities for increasing the financial capacity of territorial communities. The practice of the Poltava region illustrates the desire of local self-government bodies to use modern methods of financing rural development in accordance with present requirements.
3. The possibilities for more active use of lending and investment instruments are proposed. It is established that during the transitional period, and possibly for a longer time, a complex approach is needed - combining government subventions to regions with the enhance of their own financial capacity. It is necessary to activate the territorial community to find alternative sources of funding.