Financial Instruments for Improving the Technological Structure of Ukrainian Economy

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Abstract: In the conditions of economic integration into the world economic space, the importance of a competitive technological structure increases for Ukraine. Creating an effective economic base allows you to reproduce the functioning of the process in the face of threats and external challenges. To create conditions for socio-economic development, an important factor is the rational decision of financial policy, taking into account the priorities and strategies for managing the financial potential and the industrial complex. At the present stage, special attention is paid to the analysis of financial instruments for improving and stabilizing the economic structure to stimulate business activity, which is the strategic goal of the state economy in the context of decentralization. The purpose of the study is to identify and consider financial instruments and mechanisms for improving the technological structure of the economy and the organization of production by technological sectors and performance indicators, taking into account fluctuations in the country's qualitative structure. The improvement of the economic structure is a multi-vector process of developing financial stability, which is explained by the additional immobilization of mechanisms and resources that reduce the level of stability and independence. Financial instruments in one way or another influence the development of industrial enterprises, with the help of which the state has the opportunity to support and regulate industrial development. The practical significance lies in the use of the results of the study to improve the financial instruments of the technological system of Ukraine for the regulation of economic and industrial development.

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JEL Classification: A10, B26, D53, G15

1. INTRODUCTION

The financial system is an extremely complex mechanism, so defining it is not an easy task. It is a mechanism by which services are provided that allow purchasing power to circulate in the economy, and a certain system of interconnected financial institutions, financial markets and infrastructure elements, through which real entities can raise funds, invest savings, and meet other needs related to the financial sphere. This system creates the basis of activity for entities that use money, which allows them to enter into economic operations in which funds perform various functions. In this context, the role of structural development policy is defined, taking into account the scope and type of tools used and their impact on economic entities. An important issue is the support of economic activity, thanks to which the state has the opportunity to influence the pace of financial processes. In turn, there are barriers to the development of economic activity that significantly reduce their investment attractiveness and contribute to the activation of migration processes (Noh, 2018). Business placement decreases, since the competitiveness of the subject justifies the orientation of economic policy to interference in competitive conditions and the pace of economic changes.

Financial instruments are one of the main elements of the general conscious social system, and part of the financial sphere, which is the mechanism of the economic structure. Together with its legal, political and other modifiable functions, it creates an integrated system. The essence of the processes taking place in the financial markets is to provide temporarily available funds for consumption or economic activities to those who need them. A prerequisite for distributing and using money is to find benefits for both parties. The financial market allows business entities to become independent in their decisions regarding the consumption and size of their own resources at any time (Francesco, 2019). This means the possibility of flexibility in the establishment of a temporary structure of consumption and investment. The financial mechanism allows transferring resources between depositors and those who save them. Entities whose own resources do not allow for the full implementation of consumer and investment plans should have access to shares owned by other entities. While legal entities-depositors, due to the existence of the financial market, have the opportunity to invest their savings in enterprises that generate income,

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without the need to carry out direct business activities – production or maintenance.

Financial instruments of structural and investment funds represent a sustainable and efficient way to grow and develop the economy of the state and enterprises. With their use, a number of tasks for improving the well-being of a wide range of the economic spectrum of the country are widely supported. The policy of cohesion and growth is the main motive for the largest areas of investment to achieve reasonable and sustainable growth. Ukraine can use financial instruments as part of effective support for priority programmes financed from funds. They approach viable strategies that are expected to generate sufficient returns and must correct identified market failures and competitive conditions. Direct financial instruments support the diversification of resource constraints, which allows increasing the involvement of financial engineering mechanisms. Significant funds are also allocated for indirect support tools related to creating a business environment. One of them is considered to be technical and social infrastructure, which also includes local infrastructure, the development of which is still of great importance for the competitiveness of enterprises (Hull, 2019; Macmillan, 2019).

The use of specific financial instruments can replace or complement the production of public goods. An increase in costs on behalf of enterprises leads to a proportional reduction in the cost of producing other public goods, while for the latter, this production can be a factor in the development of enterprises. Due to the above conditions, financial instruments for improving the technological culture of the economy are classified in the following areas: direct – related to specific services financed by the public sector, enterprises; indirect – affecting all enterprises through the environment in which they operate. Direct tools focus on various aspects of activity and development, investment, or internationalisation of a particular process. In the case of indirect instruments, the dominant classification criterion is the impact on the enterprise through a widely understood business environment. This group most often includes certain administrative decisions, macroeconomic policy instruments, the tax system, the social and health insurance system, or spatial planning (Macmillan, 2019; Downs and Goodman, 2018).

The purpose of the study is to identify and consider financial instruments and mechanisms for improving the technological structure of the economy and industrial organisation by technological sectors and performance indicators, taking into account fluctuations in the qualitative structure of the country.

2. MATERIALS AND METHODS

The methodological and theoretical basis of the study consists of approaches to assessing and analysing the risks and effectiveness of financing, and the economic and statistical method. Based on the approach of evaluation and synthesis, the essence and functional characteristics of financial market instruments are summarised, economic and financial analysis of the use of features, consequences, and advantages of instruments is carried out. It is established that within the framework of this economic structure, strategies for socio-economic development of the state are created based on regularities in the development of subjects and mechanisms of economic relations in accordance with the degree of development of the system as a whole. The features that generalise the classification of factors and instruments of financial growth caused by a combination of monetary and fiscal mechanisms that are implemented at the state level as a sphere of the financial policy of the country are identified. Assessment of the risks and effectiveness of the implementation of financial instruments of monetary policy in Ukraine allowed for the conclusion that this programme is gradually being implemented in accordance with existing global trends in economic regulation. However, it should be noted that a significant gap and the negative impact of significant dollarisation provoke inflation.

The economic and statistical approach was applied when considering certain financial and economic processes and phenomena that revealed the main patterns of development of the technological structure. It allowed canonising the qualitative and quantitative influence of factors on the study results, while identifying the main factors that caused changes in the effectiveness of financial instruments. This method is used for detailed observation and emphasis of causal links in the development of individual phenomena. During the period of planning and forecasting economic processes and actions, this paradigm provided for the development and evaluation of several options for solving the economic problem, which is confirmed by a large number of techniques, planned indicators and economic forecasts. With their help, the proportionality of the pace of reproduction of the processes of the set goal in the industry and at enterprises has been established. The development of various standards of material resources analysed the actual state of financial instruments with a general optimisation of the structure, which is affected by the presence of correlation relationships and the result of quantitative assessment of the impact of parameters of economic development of the state.

Many research papers are devoted to the theory and practice of financial instruments for improving the technological structure of the Ukrainian economy. The information base confirms the versatility of financial instruments for improving the technological economic structure. However, there is a need to improve the mechanisms of industrial and economic activity of the country in relation to financial stability. Based on the constituent elements, the essence of financial components and instruments, assessment of their effectiveness and creation of development directions in the system of state economic activity were determined. Additional materials include foreign research papers, programme and planning documents, and reporting materials on the results of the activities of state authorities. Thanks to these fundamental foundations, the practical step towards verifying theoretical and real-world meaningful problems based on accurate predictions and calculations was widely considered. At all stages of the theoretical concept, economic hypotheses and recommendations were introduced to solve financial issues.

3. RESULTS AND DISCUSSION

At the present stage of development of the Ukrainian economy, a number of trends are characteristic, which are caused by negative consequences for the future productive use and development of financial instruments and resources. Such areas are marked by the influence of problematic aspects of the budget revenue side, financial conditions, the establishment of monetary policy, the settlement of inter-budgetary relations and inflationary processes caused by a significant increase in the debt burden. Under such factors, there is a lack of resources among subjects of financial relations, as evidenced by the weakening of business activity of enterprises and the gradual collapse of the investment climate. The result of this process is a negative perception of institutions and countries representing state authorities. Taking into account the identified problems, the importance of appropriate implementation and justification of effective and optimal financial instruments that can increase the productivity of the operation of the technological structure of Ukraine to create prerequisites for comprehensive economic recovery increases. The current trends indicate the need for deep and gradual reform of the main sectors of activity (Van Horn and Wachowicz, 2018).

The main direction of increasing the productivity of financial instruments implementation is the synthesis of budget planning processes and mechanisms based on macro-level development indicators. It is necessary to adopt and agree on comprehensive legal acts to improve the transparency and quality of joint activities within the framework of monetary and fiscal policies, with an accurate definition of specific responsible areas. The urgent need for systematic restructuring can rationalise and increase the role of financial balance and organisational and legal forms, which would lead to an increase in investment attractiveness with the integration of the technological structure into certain investments of individual sectors of the economy and corporations. An acute shortage of financial resources leads to a tendency to reduce the efficiency of using and forming financial support tools, which, in turn, accumulates a large number of threats to the potential of the economy. Therefore, an important element of financial support is the state policy of financing industries that include high-tech enterprises and production (Osborne, 2020; Pettinger, 2018).

The main financial instruments for improving the economic structure remain the own investment opportunities of enterprises, such as profit and depreciation charges. However, funds held in the ownership of industrial production are characterised by significantly limited functions conditioned by dependence on external factors and the lack of financial balance of operating activities. Attracting the banking sector in such conditions initiates rational financing of industrial enterprises, but the orientation of financial and credit institutions to high credit rates and short-term lending significantly limits the functional competence of the financial improvement instrument. Foreign direct investment, which finances the following types of economic activities: trade, real estate transactions, and financial activities, is also a potential mechanism for activating the economic structure. Thus, to cultivate and improve financial instruments, it is necessary to develop targeted budget programmes, introduce mechanisms for modern preferential taxation, ensure the development of long-term private and public lending, and encourage the prosperity of alternative and modern financial instruments to improve the technological structure of the Ukrainian economy.

Currently, there are and are growing imbalances in infrastructure equipment between rural areas and cities. As a result of improving the productivity of their labour, there is a need to use the surplus of labour that appears due to various sectors of the economy. The underdevelopment of labour resources and their low mobility necessitate the stimulation of business development. This process is used within the framework of structural policy, which plays a stimulating role in the development of the economic activity. Therefore, there is a need to apply the tools of the above-mentioned policy in favour of the development of entrepreneurship, because this would allow effectively using public funds and equipping certain barriers to the use of individual tools. Due to the market failures, such as external effects, information asymmetry, unemployment or imbalance, active participation in the public sector of economic development should be activated among the small and medium-sized business sector (Bloomfield, 1957). The official justification for building a strategy and implementing specific actions is to level out economic conditions. Due to the complexity of the problems associated with the development of the technological structure of the economy and their scale, it is important to apply a multidimensional approach to their solution.

Economic processes continue under the influence of structural and cohesion policies. The mechanisms and tools within their framework are aimed at reducing imbalances in economic and social development to achieve convergence between the country and its individual regions, changing the structures of the economy conditioned by the relationship between individual financial sectors, which lead to an increase in the efficiency of resource allocation. Each of them can have a significant impact on the development of economic activity and, as a result, the distribution of national income. However, it is difficult to determine only the sustainability of the effects achieved by transferring public funds through different types of policies. Support for financial instruments for the development of economic activity can be implemented in various policy areas determined by the approach to the problem, the directions of support, or the type of mechanisms used for intervention. In any case, this indirectly affects the sector of production of goods and services. After all, this process involves specific expenditures of the public finance sector, which, as a rule, lead to a decrease in the consumption of public goods. Therefore, the issue of the efficiency of using public funds is closely related to the type of tool for supporting and improving the economic system (Brimmer, 1971; Feldstein, 1986). The speed of negative factors and trends in the transition to accelerating economic growth depends not only on the scale of existing accumulated problems, but also on the policies used at the present stage and the effectiveness of its tools. On the path of industrialisation and modernisation, the economy and financial support of the real sector play an important role, ensuring the success of the necessary transformations and based on monetary, industrial, and fiscal policies. Strengthening the effect of using various financial instruments is possible when they are used not only at the macro level, but also at the micro level. In this case, the complex positions of society, business and government that influence the development model of the country and are responsible for the overall results of economic activity are fully reflected. Often, such opportunities are lost due to unproductive economic regulation and the lack of long-term development strategies. In the absence of internal sources and resources, the state actively uses the capital of other countries of the world.

Increasing globalisation processes and expanding the openness of the economy give great chances for activating the tools and mechanisms of economic activity. However, the position of focusing on external resources and expectations in foreign investment can lead to a huge limitation of the growth rate of the technological structure and the growth of debt dependence in the near future. This process often accelerates the increase in capital of the shadow economy or leads to its evasion from the country. That is why certain measures aimed at restoring national capital and removing official circulation of resources from the shadow should be taken into account to reduce the risks of outflow and reduce the cost of resources of a financial mechanism focused on reviving the technological economic structure (Laffer, 2018). Adaptation of modern methods of ensuring sustainable development is extremely practical, since, in conditions of excessive internal potential, proven financial instruments can provide real competitive strategies and comprehensive modernisation of the entire Ukrainian economy.

The issue of finding economic resources lies in the transformation of capital investments and the mobilisation of free savings in entrepreneurial structural spheres. The implementation of such a transformation is possible if there are provisions for the effective operation of the financial market, the main purpose of which is to redistribute free resources to specific entities that significantly feel the need for investment. A developed financial market predicts a significant number of intermediaries and affordable financial instruments that can satisfy the desires of demanding investors. However, in the context of crisis processes, it is necessary to introduce optimal mechanisms and tools that can regulate the activities of subjects. It is important for the government of the state to implement a policy for the development of the national economic structure, which can improve investment processes. Global economic processes contribute to the optimal distribution of resources between different sectors of the economy through their own tools, the presence of which contributes to capacity building, improving the overall dynamics of economic activity, and increasing the financial independence of funds (Sandal, 2018; Surayya, 2019).

The basis for the operation of financial and credit institutions that serve the movement of capital between the subjects of the system is the use of financial instruments, which occupy an important place in modern economic science. They include a certain range of obligations characterised by specific means of acquiring, distributing, and exercising capital. A financial instrument is defined as a product of the financial market, which is determined by the form of the transaction and is used for the purpose of raising funds. The exception is state resources – fees and taxes, which are regulated by law and form budget reserves based on income, and various types of market products that are characterised by a financial nature and act as a means of redistributing funds. The basis of their functioning is the use of money, stock, and capital markets. Conventional financial instruments include credit, insurance, deposit, and securities, while derivatives include options, futures, and forward rate transactions. Thus, these mechanisms are transformed into financial assets through fees and payments of the population and business entities. Today, the financial market is the main intermediary in the movement of resources of the technological economic structure of the country. The most powerful financial instruments for improving the technological structure of the economy are fiscal and monetary policies, which are based on the development and implementation of a set of principles that define the model of interaction of the main components of the financial system. The modern economic system of the state tries to influence the economic situation using specific tools of macroeconomic policy. Monetary policy is an important priority in this regard. In conducting monetary policy, the bank uses financial markets to influence them, redistributing them to the real economy. Using various tools, the situation and basic values are determined, which are the size of the proportion of money or the level of interest rates. The state acts in the financial market as an ordinary participant, which often does not have the necessary funds to implement economic and social measures, and borrows them from the financial market. Taking into account the scale of tasks performed by a country, it is usually the largest borrower in the structure of the economy (Sunderasan, 2018).

In the period that has passed since the beginning of the transformation processes, the market of financial instruments in Ukraine begins to develop. Taking into account the fact that the dynamic increase in the volume of shares occurred with a slight increase in the number of companies whose shares are registered with the depository, it can be stated that the main source of increase in this volume was new issues of companies whose shares are traded on the market. The acquisition of additional capital through new issues of shares by public companies indicates that this method of financing development is profitable, and in the future, it should be assumed that the number of business entities that will raise capital by issuing public shares will increase. For other financial instruments of the general technological economic structure, bonds, foreign stocks, investment certificates, corporate bonds, and mortgages are included. Data indicating an increase in the interest of foreign issuers who list their own shares on the stock exchange are important for assessing the development of the domestic economic market. Their number is too small, but the emergence of corporate and mortgage bonds over the past few years indicates a positive evolution of the economic structure.

Building financial markets is an integral part of the development of civilization. All stages of economic and cultural development are associated with new solutions and tools in the field of trade organisation and the importance of money, the role of finance and institutions. The most important mechanisms of the financial market are also banking, insurance and the state securities market, which are often subject to detailed regulation, which is partly subject to international coordination. The main market segments are under the supervision of specialised supervisory institutions and the commission, which, in turn, ensure compliance with the current legislation by entities belonging to this sector. Unlike other areas of economic activity in which the state does not create any restrictions on doing business, in the financial sector all processes are subject to the permission of the relevant state body. The structure of the financial market depends on society, its knowledge, ways of understanding modern mechanisms and conditions of competition, which are based on specific conditions and prefer innovation, entrepreneurship and partial risk (Sinclar, 2019). The operation of financial instruments is related to the maintenance of current liquidity by business entities, which is understood as the ability to cover their obligations. It includes the following instruments: treasury, monetary, and commercial promissory notes, interbank deposits, certificates of deposit, promissory notes. Thus, the government finances current budget needs. These documents are considered safe because the ransom is guaranteed by the state. Due to the low risk of the issuer's insolvency, they have low interest rates and, consequently, low capital acquisition costs. As an investment, they are popular among financial institutions, where trading is organised in the primary and secondary markets, which are characterised by high liquidity and cause partial ease of buying or selling. They are characterised by a low cost of obtaining a bank loan and lower labour consumption when obtaining the desired funds. This is conditioned by the fact that this problem is not related to the need to conduct analyses and assess the ability to pay obligations, as it happens in a bank. These are dangerous tools, so they can only be sold to companies with a high reputation and financial condition.

Currency is an indispensable tool and mechanism for financial transactions in the foreign exchange market, which occupies the vast majority of the technological structure of the economy. Anyone who exchanges the currency of one country for another participates in the foreign exchange market. Investing in this market involves high risk, known as currency risk. This is conditioned by the instability of exchange rates. The exchange rate is determined by the quantitative relations in which one currency is exchanged for another. The level of the exchange rate depends on many factors, including supply and demand, the economic situation of the country, the level of inflation in the economy, and the level of budget deficit. This concept is crucial for any economy due to the profitability of transactions on international economic markets, which represent exports and imports. Therefore, the bank occasionally makes currency interventions to achieve a satisfactory level of exchange rate. Currency transactions are concluded constantly and most often relate to speculative purposes for investment, the need to settle commercial and foreign transactions and financial settlements of international corporations (Ritchie and Dowlatabadi, 2014; Harring, 2014). In addition to the conventional financial instruments of the economic structure offered in the financial market, there are also derivatives that are a combination of conventional and modern mechanisms. Derivative financial instruments depend on changes in the value of the underlying element, and their common feature is the difference between a contract for the purchase or sale of a derivative financial instrument, regardless of the type of derivative mechanism. This fact makes investments relatively small capital, with low price changes of which it is possible to both make a significant profit and incur significant losses, several times higher than in the market of basic instruments. The main purpose of using such derivatives is to be able to effectively transfer risk by business entities with a low-risk propensity to entities that want to sort them out to generate income. Entities can protect themselves from risks associated with uncertain prices, including stocks, interest rates, and currency exchange rates.

Hybrid financial instruments are also instruments of the economic structure operating in the financial market. They are another form of obtaining capital by business entities and are characterised by the possibility of replacing one form of financing with another. An example of such a mechanism is bonds that are converted into shares. This is a debt security with an option to exchange capital, that is, the same retirement from bonds. Convertible bonds give the holder the right to convert a certain number of shares of the company over a certain period of time. The conditions set at the time of issue for a single bond during conversion are determined by the exchange rate. In addition, a hybrid instrument may have the right to purchase another financial instrument at a certain price. This model is a bond with a concluded order. The order includes the right to purchase shares at a certain price and at a certain time. Hybrid instruments also include foreign currency loans backed by derivatives used to hedge and provide a certain level of income for exporters. Due to the high financial leverage, contracts and currency options are often used for speculative purposes. Therefore, the use of modern economic engineering tools that do not meet their intended purpose, instead of improving efficiency, can lead to a loss of financial liquidity (Panayotou, 1994). Financial instruments are a special category of expenses, the success of planning and implementation of which depends on the correct assessment of gaps and market needs. Consequently, in the context of the operational programme, a new provision is applied, according to which financial instruments should be planned based on a preliminary assessment, due to the identification of weaknesses in the structure of the technological economy or suboptimal investment processes that correspond to the investment needs in the financial instrument sector. Preliminary evaluation avoids overlaps with financing tools implemented by different participants at different levels of activity. The operating environment for financial instruments, administrative potential and technical experience can guarantee the successful implementation of modern mechanisms of the state economy. Under this development option, the contributions of operating programmes to financial instruments will be allocated exclusively to investments in regions and certain activities covered by the operating programme from which contributions are received in one way or another.

The state policy of the economy implemented today directs its assistance to programmes that were not justified in the market, which led to an irretrievable decrease in the effectiveness of financial mechanisms. Financial methods are usually used to support investments that are considered financially viable, even if they do not receive sufficient funding from market sources. Because of the leverage effect on overall strategic frameworks aimed at increasing the role in overall spending, tools are becoming increasingly important systems to support the effective launch of specific solutions. Inefficient use of the planned latest programmes may lead to the loss of funds and the imposition of financial fines on them, which will negatively affect the financial prospects of Ukraine for the next years. In terms of financial expectations, the existing system of policy tools is mainly based on funds from selected regional operational programmes. They provide basic financial engineering mechanisms from which micro, small, and medium-sized enterprises can benefit. The system is aimed at supporting innovative projects that focus on financing investment activities (Roome, 2015).

4. CONCLUSIONS

Thus, modern financial instruments for improving the technological structure of the economy ensure the sustainable and continuous development of an integral system. In the context of untapped internal potential, mechanisms encourage the implementation of various strategies and competitive programmes, which, in turn, can modernise the Ukrainian component of the economy. The experience of different countries gives an invaluable impetus to the well-coordinated operation of the financial system, which is possible in the conditions of organising an active financial market and optimal use of resource allocation among business participants. Financial instruments are the main means of directing available funds to the creation of capital and the sphere of investment. The state forms its resources through those mechanisms that are established administratively, so these are special products in the market of forming and obtaining economic benefits and income. As a result of their implementation, buyers make investments and acquire rights to income, and issuers receive financial resources and obligations.

At the present stage of development of the Ukrainian economy, state authorities are trying to implement optimal policies in the financial market to improve the use of tools to establish mechanisms for stimulating business activities and attracting investment resources. The dynamic system of financial policy is constantly adapting and transforming to the key tasks of socio-economic development, the tools of which determine the signs of economic regulation, institutional environment, and public choice. The purpose of financial mechanisms is to ensure an appropriate level of development of society, taking into account the rational division of public finances. On their basis, combinations of organisational, legal, and economic measures for the strategic development of the economic structure are implemented. Accordingly, these measures should be understood as the directed use of components of financial impact on the integral system of relations determined by financial and economic motivation and interests of state policy.

Financial instruments cover the activities of state economic and financial institutions that are directly involved in the process of developing, implementing, and monitoring the financial policy of Ukraine. Their main components are tax, investment, budget, social, and monetary policies, which ensure economic stability by creating the necessary conditions for the constant growth of the technological structure. The most powerful means of financial development are fiscal and monetary policies. The development and implementation of effective mechanisms is based on a set of complex concepts that outline the relationship between the components of financial and economic structures. Therefore, existing programmes require some restructuring and sectoral reform by accelerating radical changes to ensure joint integration and the use of effective financing tools.

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