LONG-TERM LENDING FOR PUBLIC-PRIVATE PARTNERSHIP PROJECTS: OPPORTUNITIES AND PROSPECTS

ABSTRACT

The article is devoted to the topical issues of long-term lending to public-private partnership projects in the context of a permanent shortage of budget funds and the financial instability of business entities. The purpose of the study is to highlight the problems of attracting long-term credit resources by partners in the process of implementing joint projects and to outline areas for their solution. To achieve this goal, general scientific research methods and analytical data from the State Statistics Service of Ukraine and the National Bank of Ukraine were used.

The article reveals the main problems in the development of the debt financial instruments market, which make partnership projects between the state and business unattractive for investors. It is argued that the possibility of providing long-term loans depends not only on the actions of the bank, but also on the monetary policy of the NBU, which should ensure the introduction of preferential reserve requirements for banks, the provision of irrevocable deposits, the NBU’s approval to refinance banks for the implementation of PPP projects, and the introduction of preferential lending by banks to PPP projects. The authors emphasize the priority importance of the state policy on the development of programs for the availability of long-term loans in the process of implementing partnership projects. Given the underdevelopment of financial instruments for public-private partnerships, the author substantiates the need to use innovative instruments – credit derivatives, the effectiveness of which is confirmed by international experience. The article offers a list of the most effective financial instruments that should be used at each stage of the project life cycle.

It is concluded that the recommendations provided will ensure that the partners attract the necessary amount of financial resources in the process of long-term project implementation and will allow them to obtain a synergistic effect from such cooperation.

Keywords: public-private partnership, financial resources, financial instruments, long-term lending, partnership projects, credit derivatives

JEL Classification: G31, G38, H54

INTRODUCTION

The effective functioning and development of a competitive domestic economy necessitates the implementation of projects that will contribute to sustainable economic growth and the well-being of citizens. In the context of the economic crisis, Russian aggression, chronic budgetary constraints, a significant level of economic shadowing, and ineffective public administration, the success of these tasks depends on constructive cooperation between the authorities and business structures. At the same time, at this stage of the country’s development, the issues of accumulating the necessary amount of financial resources, their rational distribution and efficient use in the implementation of partnership projects between the state and business need to be reviewed and improved.

Budgetary and private investments do not cover the costs necessary for the partners to achieve their goals. Taking into account the global experience of financing public-private partnership (PPP) projects, we note that the most acceptable option is a symbiosis of the private partner’s own funds and long-term credit resources raised from financial...
institutions. It is the latter source of financial resources that will help meet the financial needs of partners in the implement-
ment of infrastructure projects. However, in Ukraine, these resources are of limited use due to the lack of «long funds» in the banking sector, underdevelopment of the stock market, unstable macroeconomic environment, and inconsistent implementation of financial policy. In this regard, it is an urgent task to address these problems in order to find sources of long-term lending for partnership projects of the state and business, which will facilitate their effective implement-
ment.

Long-term lending is a high-risk activity that requires the accumulation of a significant amount of financial resources and the use of innovative instruments and levers in the financial market. This type of financing for public-private partnership projects can be used by banks that provide syndicated lending. Given the capital intensity of partnership projects, their long implementation period, and high financial risks, local commercial banks are mostly unable to lend to PPP projects at low-interest rates. This necessitates addressing the challenges of attracting long-term credit resources by partners.

**LITERATURE REVIEW**

The economic literature shows an increased interest in the use of the public-private partnership mechanism. However, the search for ways to attract long-term loans to implement PPP projects has been studied sporadically. Among scholars, it is worth noting the works of Y. Belinska and T. Kalyta [1] on defining the role of banks in financing investment and innovation activities on the basis of public-private partnerships in Ukraine, as well as unlocking the potential of investment lending to partner projects based on the study of analytical data of the National Bank of Ukraine, its prospects as protection against the risk of an inflationary spiral; G. Krysthal [10], which is devoted to the mechanisms and instruments of partnership on the part of the state in cooperation with the banking sector; N. Moroz [17], which describes the essence of a syndicated loan in the economic environment, identifies the benefits of using such loans for the bank and the borrower, analyzes the epistemology of the development of the syndicated loan market in Ukraine and identifies the problems of its functioning in Ukraine; O. Stefankiv and V. Danylyshyn [22] on intensification of domestic investment in the economy and creation of new models of financial incentives for the private sector to cooperate with the state, application of the latest financial and credit instruments in the process of public-private partnership; Y. Tkachenko [23] on systematization of sources of financing of basic infrastructure used in world practice, determination of advantages and features of project financing, activities of development banks as the main subjects of infrastructure financing.

The issues of financing public-private partnership projects with the involvement of bank loans are also covered in the scientific works of foreign scholars. A. Kuznyetsova, O. Klipkova & V. Maslov [11] devoted their own research to the methodology for evaluating the effectiveness of public-private partnership projects. P. A. Ofori, K. Twumasi-Ampofo, J. A. Danquah, E. Osei-Tutu and S. Osei-Tutu [18] investigate the problems of financing projects that are jointly implemented by public and private sector entities. The authors highlight the factors that lead to a low level of financial support for partnership projects, in particular: insufficient government support, the mismatch between the amount of long-term loans provided by banking institutions and the financial needs of partners, and the lack of a developed guarantee mechanism for the return of funds raised. In view of this, scholars recommend creating a specialized body that would carry out financial planning, create legislative conditions and develop organizational measures to ensure the accumulation of financial re-

ources, including credit, in accordance with the needs and capabilities of partners.

Y. M. Lasa, R. Takim and N. Ahmad [14] believe that the financing of public-private partnership infrastructure projects is accompanied by unfavourable financial market conditions, limited supply of long-term bank loans, unattractive credit condi-
tions, and high-interest rates. At the same time, given the high cost of the project, scientists propose a combination of debt (syndicated and preferential government lending) and equity financing. In a subsequent article, the same researchers [12] found that 70% to 95% of the project cost is debt financing. Therefore, they believe that banking institutions are exposed to high credit risk. This necessitates an assessment of a private company's creditworthiness based on criteria such as project cost, borrower's financial position, loan agreement terms, transaction costs, and security package.

N. Linh, X. Wan, H. Th. Thuy [14] explores promising sources of raising financial resources for the implementation of partnership projects between the state and business in the long term. At the same time, they note the significant role of banking institutions by providing loans to the project company.

R. Osinski [20] revealed the factors that influence the choice of sources of financial resources in the process of implement-
ing partnership projects between the state and business. Based on the results of the study, the researcher concluded that bank loans attracted not only in the domestic debt market but also in the external one, in particular in the European Union, play a dominant role in financing such projects. In view of this, the authors emphasize the need to create favourable conditions for attracting loans from various economic actors: foreign states, institutional investors or households.
L. Zhu and D. K. H. Chua [26] investigate the issue of determining the banking capacity to finance public-private partnership projects in order to ensure timely lending in the long term. The researchers proposed 41 criteria, each of which was analyzed by financial experts with experience in the field of government-business cooperation. Based on the results of the expert assessment, 8 key criteria for banking solvency were identified in a hierarchical order: state financial policy, economic environment, investor confidence, financial market development, legal system, public sector reliability, financial condition, and regulatory framework.

F. Blanc-Brude and R. Strange [2] investigate the factors that affect the cost of credit resources raised by partners in the process of implementing joint projects. Scholars believe that contrary to standard debt pricing models, factors such as loan size and maturity are not reflected as significant determinants of debt value in PPPs, which leads to a high degree of confidence among lenders that loans will be repaid or collected. Instead, they note that the dominant influence on the price of debt capital is exerted by credit risks, which require effective management methods. At the same time, technical risks can be neutralized by developing an optimal project structure.

A. N. Chowdhurya, P.-H. Chenb and R. Tiong [3], defining credit as the primary source of project financing, carried out a five-factor analysis to determine the creditworthiness of borrowers in order to ensure the fulfilment of debt obligations. In their opinion, such an assessment of the financial condition of the company will help reduce credit risks and improve the efficiency of the loan portfolio of banking institutions.

X. Wang, L. Shi, B. Wang and M. Kan [25] developed the most effective method for assessing the level of credit risks based on the study of the impact of cash flow uncertainty on the potential losses of the bank in the process of financing PPP projects. The scientists proposed to use three indicators: the probability of borrower default, the return on borrowed financial resources, and the risk in case of default.

It is worth noting that S. Geng, L. Lin, Y. Yin and H. Yan [6] also paid considerable attention to the methodology for determining the most profitable project. The researchers proposed an index system consisting of 5 attributes, 14 criteria, and 45 sub-criteria. This methodology allows a commercial bank to assess the feasibility of lending to a particular project, and to predict risks and uncertainties in the process of its implementation. The effectiveness of the evaluation system has been proven in China's practice.

V. Khmel and S. Zhao [9] have developed a financial strategy for diversifying the sources of funding for a public-private partnership project, taking into account the stages of its life cycle. The researchers believe that such a strategy will help improve the mechanism for raising capital and increase the private partner's ability to fulfil its debt obligations.

Despite some elaboration on the issue of lending to PPP projects, most scholarly works cover the issues of financing such projects in the short and medium term. In view of this, an urgent task today is to study the possibilities of developing long-term lending in the context of determining the prospects for attracting financial resources not only from specialized credit institutions but also from other economic actors, including household savings.

**AIMS AND OBJECTIVES**

The purpose of the article is to study the problems of long-term lending to public-private partnership projects and to outline the ways to solve them. To achieve this goal, the following tasks are required:

- to highlight current trends and prospects for the functioning of the domestic debt financial instruments market;
- to reveal the possibilities of using monetary policy tools for long-term lending to partnership projects of the state and business;
- to determine the role of Ukraine's state policy in developing the latest tools in the field of the above-mentioned lending;
- providing a list of the most effective financial instruments that should be used at a certain stage of PPP project implementation to minimize the cost of borrowed capital.

**METHODS**

To achieve the stated goal and solve the defined tasks, general scientific research methods were used, in particular: statistical analysis, synthesis, induction, deduction, grouping, and comparison – in the study of the current state and disclosure of problems of the debt financial instruments market; theoretical generalization, systematization, analogy and argumentation – in revealing the stimulating role of public financial policy in the implementation of long-term lending to
public-private partnership projects; optimization and argumentation – in developing practical recommendations for the development of innovative instruments in the field of the above-mentioned lending.

RESULTS

The implementation of public-private partnership projects requires the attraction of long-term credit resources. However, investors or lenders are not interested in investing in these projects due to their high risk, high capital intensity, and low profitability. The limited supply of long-term loans from banking institutions is accompanied by a decline in demand for these resources by business entities due to their high cost and difficult conditions for attracting them. The situation is complicated by problems in the development of Ukraine’s debt financial market, in particular: the underdevelopment of its instruments, which makes it impossible to attract the necessary amount of financial resources; the low level of development of the exchange mechanism compared to the global economic space; insufficient transparency, information and liquidity; and distrust of potential investors or creditors in conducting financial transactions in this market. These problems can be solved by combining the efforts of all stakeholders in economic relations aimed at increasing the investment attractiveness of debt financial market instruments.

In view of the above, it is necessary to:

▪ ensure favourable financial, institutional, legal and macroeconomic conditions that will increase the investment attractiveness of the capital market;
▪ diversify debt financial market instruments by the maturity of borrowers’ obligations and the sectoral characteristics of PPP projects;
▪ develop cooperation between banking institutions in the context of syndicated lending. Such joint activities, based on the principles of equality, contractual responsibility, and unity of economic purpose, will help meet the partners’ needs for long-term financial resources in the course of project implementation, and will reduce the cost of funds raised by distributing credit risks among all members of syndicated lending;
▪ popularize debt instruments among the public by creating a digitized information space (including crowdfunding). This type of online platform will help to reveal the benefits of using debt instruments, and the specifics of their use in various investment sectors, and increase public confidence in making investments. According to the State Statistics Service of Ukraine, family farms are a promising source of financial support for public-private partnership projects. The share of savings in the structure of total income of these entities was dominant in 2012 (10.10%), 2013 (7.51%), and 2022 (10.72%). However, in 2013-2021, its level was significantly lower (it ranged from 0.16 to 2.03 percentage points), and in 2019 it was absent (due to the prevalence of household expenditures over their income) (Figure 1).

Current trends in household savings indicate that these entities are able to save their accumulated funds in bank deposits. At the same time, B. Danylyshyn believes that «the growth of bank deposits can also occur under the influence of temporary short-term factors that are not related to the formation of gross national savings» [4]. In particular, an increase in the volume of deposits is possible at the expense of funds saved in previous years or funds received from the sale of
property (cars, houses, apartments, summer cottages, etc.). This was the trend observed in the domestic practice of households in 2010-2022. Thus, as savings decreased, the volume of their bank deposits in the period under review increased by UAH 770,638 million, and their share in the total structure of deposits of other economic entities ranged from 52.8% to 66.0% (Figure 2).

Despite the dominance of family households’ deposits over those of other residents, the data in Figure 3 shows that since 2019, demand deposits have been prevalent. The reason for this trend is the growing public distrust of commercial banks.

Long-term lending to public-private partnership projects depends not only on the financial capacity of commercial banks but also on the monetary policy of the National Bank of Ukraine (NBU). By using emission, mandatory reserve requirements, preferential interest rates, and refinancing, the Central Bank can ensure that partnership participants have access to long-term loans. In particular, the necessary actions of this institution are:

- reducing the mandatory reserve requirements for commercial banks that provide long-term loans to government and business partnership projects;
Government financial policy plays a dominant role in developing strategic directions for the development of long-term lending for PPP projects. Its main tasks are to formulate a set of incentive measures aimed, on the one hand, at ensuring the availability of credit resources for borrowers, and, on the other hand, at protecting creditors from default. Therefore, it is advisable to envisage the issuance of specialized securities – bonds intended to finance partnership projects between the state and business, with their subsequent placement on the domestic and global stock markets. In the practice of economically developed countries, the most common are infrastructure bonds issued by a project company. Such debt securities are attractive to investors because they are issued under state or local guarantees.

The likelihood of a significant financial risk arising from the long-term implementation of projects affects the ability of potential investors and lenders to make investments. In view of this, the investment revival of business structures requires the use of financial instruments that have proven effective in economically developed countries and protect the financial interests of participants in public-private partnerships. Y. Ovsyannikova believes that credit derivatives, such as credit default swaps and credit notes, are promising [21, p. 40]. Such derivatives, which provide for the provision of guarantee support for the fulfilment of obligations by debtors, encourage banking institutions to increase lending. It is worth noting that the main advantages of such instruments are: avoidance of default risk by the lender; possibility of diversification of credit risk without the client's knowledge; redistribution of risk among other creditors without ownership of the collateral asset; payment of an urgent payment by the seller of these financial instruments to the buyer in case of inability to make payments by the borrower.

However, despite the benefits of using credit derivatives, they are not widespread in the domestic practice of public-private partnerships, due to the lack of a legislative framework in this area, distrust of economic entities in their use, and underdevelopment of derivative financial instruments. Therefore, the main tasks for ensuring the use of credit derivatives in the field of public-private partnership are as follows:

- developing a legal and regulatory framework to establish the procedure for conducting transactions with such instruments;
- increasing the investment potential of the economy by stimulating the attraction of funds from institutional investors and the public;
- applying the best international experience in domestic PPP practice, taking into account national peculiarities of financial market development;
- ensuring transparency of the derivatives market, which will help to ensure the trust of potential investors.
The implementation of these measures will facilitate the spread of derivative financial instruments in the implementation of partnership projects between the state and business, increase the financial stability of banking institutions, reduce the risks of borrower insolvency, and increase opportunities for refinancing lending activities.

The effectiveness of the implementation of partnership projects between the state and business depends on a stable and continuous flow of incoming financial flows. Therefore, an important task of the partners is to optimize financial instruments in order to ensure symbiosis – minimizing the cost of borrowed funds and achieving socio-economic goals in the long-term period of joint activities. At the same time, the choice of the most effective financial instruments should depend not only on the financial capacity of the state and business but also take into account the specifics of the stages of implementation of partnership projects.

In our opinion, the use of the traditional life cycle curve of any project has made it possible to visualize the list of financial instruments that should be used by partners in the design, construction or modernization, operation, and final period of project implementation in the best way possible (Figure 4). Given the lack of lending activities of the newly created project company, it is advisable to use instruments that are affordable and have a lower cost at the initial stages. For example, the most optimal options for designing are private partner investments, budget allocations, convertible bonds and shares of the project company, and for the construction or modernization of an infrastructure facility, in addition to the own funds of business entities, it is advisable to use: a syndicated loan, state and local guarantees, derivative financial instruments, etc. The following stages of investment project implementation are characterized by lower financial risks, which facilitates the use of a wide range of instruments, including bank loans, bonds, credit derivatives, government financial support in the form of tariff benefits, and compensation for losses to the private partner. The final stage involves a decision by a public authority (local government) to independently manage the infrastructure facility or to enter into contractual arrangements with another business entity to carry out management actions. At the latter stage, the problems of attracting additional financial resources increase due to the growth of their cost.

We believe that such a list of financial instruments is not standard, given the industry specifics of public-private partnership projects. At the same time, adherence to the methodology of its use throughout the project life cycle will help diversify the sources of raising the required amount of funds; fulfill financial obligations by partners in the long-term period of cooperation; and achieve certain budgetary, financial, socio-economic, and environmental goals.
DISCUSSION

The scientific literature still debates the feasibility of using innovative debt financial instruments (credit derivatives, project bonds, mezzanine loans, etc.) in the domestic practice of public-private partnerships, which have been proven effective in economically developed countries. In view of this, the opinions of scientists are divided. Some [8; 18; 23], emphasizing that such instruments are not adapted to the conditions of Ukrainian realities, consider their use inappropriate. Others [5; 14] provide a set of measures for their possible implementation in the domestic sphere of implementation of partnership projects between the state and business. It should be noted that the tools of the financial mechanism of public-private partnerships in the world are quite developed. We believe that it would be advisable to borrow some of the instruments and adapt them to domestic conditions. This will help attract investments from various sources (internal and external) and increase opportunities for obtaining long-term financial resources in the process of implementing partnership projects of state or local authorities and business entities.

At the same time, there is some debate about the feasibility of attracting international long-term loans. Excessive borrowing and inefficient use of external loans can lead to increased currency risks, debt refinancing risks, and increased debt dependence. Therefore, it is necessary to determine the optimal ratio between external and internal loans, which will help to meet the financial needs of partners in the course of long-term cooperation.

CONCLUSIONS

To summarize, the lack of «long funds» in the banking sector, insufficient development of the debt financial instruments market, unstable macroeconomic environment, and inconsistent implementation of financial policy negatively affect the results of the implementation of partnership projects between the state and business, which is manifested in higher prices for services provided, a shortfall in the expected amount of profit by the private partner, and mostly premature termination of projects. In view of this, the authors provide proposals for solving these problems. In particular, it is proposed to: create conditions that stimulate the attraction of funds to the capital market in the context of ensuring macroeconomic, political and financial stability; deepen the diversification of types of debt financial instruments by maturity and sectoral specifics of PPP projects; promote the development of syndicated lending; reduce the cost of funds raised by reducing credit risks; and create an information space to promote debt financial instruments among the population.

The article highlights the role of the NBU’s monetary policy in ensuring the availability of long-term loans for partners in the implementation of joint projects. Therefore, the Central Bank should introduce preferential reserve requirements for banks, provide opportunities to use irrevocable deposits, agree to refinance commercial banks for PPP projects, and introduce preferential lending by banks to PPP projects. At the same time, the priority importance of state policy in this area has been determined. It should be aimed at developing and implementing government programs to subsidize interest rates on loans, as well as special refinancing programs for banks to attract new borrowings with a longer maturity.

Given the dynamic development of the financial market, there is a need to use innovative financial instruments in the field of public-private partnerships that meet the new challenges of the economic space and the current needs of partners to achieve certain goals. In view of this, the article identifies the advantages of using credit derivatives in the process of financing partnership projects, reveals the problems of their use in Ukraine, and proposes measures that will facilitate the spread of these instruments in the field of PPPs.

The list of financial instruments to be used at each stage of project implementation (design, construction or modernization, operation, and final stage) has been optimized, which will minimize the cost of servicing borrowed capital and at the same time help the partners achieve their strategic goals in the course of project implementation.

We consider that the recommendations provided will ensure that the state and business entities attract the necessary financial resources in the long-term period of their cooperation, and will also contribute to the achievement of socio-economic results by the participants of the partnership.

Given that the effectiveness of infrastructure projects depends on the fulfilment of financial obligations by partners, the prospect for further research is to develop tools for a guarantee mechanism to create favourable conditions for investment activity. This will help to mitigate financial risks, increase the investment attractiveness of the project, and revive the confidence of business structures in cooperation with public authorities or local governments.
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CONFLICT OF INTEREST

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REFERENCES

ДОВГОСТРОКОВЕ КРЕДИТУВАННЯ ПРОЄКТІВ ДЕРЖАВНО-ПРИВАТНОГО ПАРТНЕРСТВА: МОЖЛИВОСТІ ТА ПЕРСПЕКТИВИ

Стаття присвячена актуальним питанням довгострокового кредитування проектів державно-приватного партнерства в умовах перманентної нестачі бюджетних коштів і фінансової нестабільності суб’єктів підприємницької діяльності. Метою дослідження є висвітлення проблем залучення довгострокових кредитних ресурсів партнерами в процесі реалізації спільних проєктів та окреслення напрямів їх вирішення. Для досягнення поставленої мети використання фінансових інструментів, які доцільно застосовувати на кожному етапі життєвого циклу проєкту.

Розкрито основні проблеми розвитку ринку боргових фінансових інструментів, що зумовлюють інвестиційну неприблизивість партнерських проектів держави та бізнесу. Аргументовано, що можливість надання довгострокових кредитів залежить не тільки від дій банку, а й від грошово-кредитної політики НБУ, яка повинна забезпечити запровадження пільгових норм резервування коштів банків, надання можливостей використання безвідкличних депозитів, процесі довгострокової реалізації проєктів і дадуть змогу отримати синергетичний ефект від такої співпраці.

Підсумовано, що надані рекомендації забезпечать залучення партнерами необхідного обсягу фінансових ресурсів у процесі довгострокової реалізації проектів та дадуть змогу отримати синергетичний ефект від такої співпраці.
Ключові слова: державно-приватне партнерство, фінансові ресурси, фінансові інструменти, довгострокове кредитування, партнерські проекти, кредитні деривативи

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