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**WORLD PRACTICE OF FINANCING INFRASTRUCTURE  
PROJECTS BASED ON PUBLIC-PRIVATE PARTNERSHIP**

**Abstract:** The article discusses the global practice of financing infrastructure projects based on public-private partnership with the determination of the possibility of application in Kazakhstan. It has been established that despite the presence of specific features of financing, support and the used schemes of interaction between the banking and real sectors of the economy through the use of the public-private partnership mechanism, they interact without fail with the participation of the state institution, whose goal is to support the interaction process using alternative tools such as guarantees, insurance, subsidies, tax breaks, etc. In the conditions of Russia and Kazakhstan, taking into account the Eurasian Economic Union, recommendations on the development of mechanisms for interaction between the banking and real sectors of the economy in the framework of the implementation of the infrastructure of public-private partnership have been proposed.

**Keywords:** public-private partnership, infrastructure projects, global experience.

**Introduction.** Appeal to the world practice of public-private partnership (PPP) shows that over 50% of successful examples of PPP projects are carried out with the participation of monetary institutions: state banks (China), state infrastructure banks (Great Britain and the United States), specialized banks with state participation (Germany, France) and development banks. At the same time, the presence of a developed institutional environment in OECD countries allowed improving PPP mechanisms with the participation of banks, due to which it was possible to significantly change the role of the state in the interaction process and expand its scope. In particular, in China, up to 50% of all infrastructure projects in the country are financed by the sustainable resource base of state banks, formed by issuing guaranteed by the Ministry of Finance, bonds and household deposits. The transfer of the created infrastructure companies to self-financing through the sale of shares to an IPO and cash flow from paid services of ready-made infrastructure facilities together provide for the return of loans issued by banks.

A feature of the US state-owned infrastructure banks is their right to issue bonds backed by capital and payments to repay loans from a pool of local borrowers, which reduces risks for investors and the cost of resources. Various sources, including targeted use of tax revenues, special contributions or receipts from the payment for using the infrastructure (for example, fuel charges, the amount of which varies by region) - provide for the return of loans issued. At the same time, credit guarantees are used that allow borrowing at a low price.

**Methods of research.** The theoretical and methodological basis of the research is the classical theory of reproduction, the work of domestic and foreign economic scientists in this direction, as well as scientific and theoretical materials in scientific monographs and periodicals.

In preparing this article the systematic approach, methods of comparative analysis, as well as factor analysis and generally accepted methods of economic research were used.

**Results obtained.** Specialized banks in Europe with state participation in the capital support the real sector together with private banks. They occupy a neutral position between commercial banks and enterprises, carrying out concessional financing of the project and taking up to 50% of all credit risks. Additionally, in such financing schemes, guarantee banks are used, which accumulate up to 80% of the credit risks of projects oriented primarily to SMEs. The attractiveness of such co-financing is achieved when loans cover up to 40% of the investment required for the project. For such joint loans, a grace period for the payment of interest payments is established, and for the amount of principal debt installments up to 10 years.

In India, the role of the financial regulator in increasing the participation of banks in the implementation of PPP transactions by deciding to consider the annual payments of the state (compensation payments for PPPs) and the right to collect payment for services from the sale of the finished PPP object as “solid collateral” for banks is important also establishing a differentiated approach to the level of provisions for unsecured infrastructure loans [1].

Despite the existing features of financing, support, and used schemes of interaction between the banking and real sectors of the economy based on the use of the PPP mechanism, they interact without fail with the participation of the state institution whose goal is to support the interaction process using alternative instruments (guarantees, insurance, subsidies, tax incentives etc.). In addition, the experience of foreign countries shows that the boundaries of PPP are much wider than the participation of the state and business in the implementation of infrastructure projects. The authenticity of the use of PPP mechanisms in order to intensify the interaction of the banking and real sectors of the economy is evidenced by its advantages in terms of meeting the needs of the national and regional economy and its correlation with the solution of previously identified problem nodes: “risks”, “resources” and “regulation” limiting the effectiveness of the process of interaction between the subjects of the banking and real sectors of the economy.

Despite the fact that the development of large-scale infrastructure projects in the construction of roads and high-speed rail lines, port facilities and air terminals and the modernization of engineering infrastructure, significant amounts of funds are invested, however, the chronic shortage of infrastructure financing persists worldwide, on average, from 20% to 40% of the total existing needs.

At the same time, estimates by some experts indicate that government investment generates a multiplicative effect in the ratio of 1 / 1.6 dollars while reducing the transport and operating costs of a business. According to McKinsey research conducted for developing countries in 2014, 1% of GDP investment in infrastructure contributes to the creation of 4 million additional jobs in India, 1.5 million in the United States and 1.3 million in Brazil. Calculations by the Ministry of Economic Development of Russia show that such costs for the development of transport infrastructure alone will provide 0.3% of GDP growth and 1.7 million additional jobs, while transport costs for all types of goods are reduced by 10% at the same time, which in turn, adds 0.12% to GDP. In this regard, maintaining GDP growth at 4% per year will require an increase in expenditures on the development of engineering infrastructure to 70 trillion. dollars for the period up to 2030 [2-4].

To date, in the structure of infrastructure investments in terms of sources of financing, more than 65% fall on state budgets and funds, since infrastructure projects, fulfilling, including the social function, are not focused on obtaining high commercial results and, therefore, are not interesting for private business entities. business. For example, the share of the banking sector in Russia and Kazakhstan is on average 7.7% of the total investment in infrastructure. Such modest participation is limited to high industry risks, problems accumulating long-term liquidity and the high cost of banking resources. In addition, on the part of business representatives, there is still uncertainty that the state will be able to insure participants' risks for the entire period of a long-term project implementation against the background of an annual budget review and approval [4].

Under these conditions, the most active participants in the implementation of infrastructure projects in Russia and Kazakhstan are development institutions and banks with state participation in the capital (Gazprom, VTB, etc.). For example, the Bank for Development of Russia (Vnesheconombank), having

corporations in the PPP regions, can take infrastructure deposits and provide loans in the transport and energy sector at the expense of the National Wealth Fund (in the amount of 40% of the Fund's funds).

From the point of view of the development bank's participation in infrastructure projects, the most promising, in our opinion, is the use of mezzanine financing, which is a quasi-financial instrument with the features of equity and debt financing instruments, since it is possible to convert it into equity capital after commissioning the PPP facility and ensure the return of funds in the form of dividends. Its size can vary from 5 to 100 million dollars with a maturity of 2 to 10 years. At the same time, the Development Bank has the opportunity to invest capital in exchange for the shares of SPV - a company, acquiring rights to the company's assets and participation shares with payment of dividends.

However, a more significant impetus to the development of this area of PPP, in our opinion, can be given by the active participation of private banks, including regional ones. World experience shows that the implementation of infrastructure projects takes place with the participation of SPV - a company that transmits issued bonds secured by loan rights, which, due to their inclusion in the Lombard list, can be used by the central bank for making repos, with the participation of SPV. At the same time, minimization of risks for domestic second-tier banks is possible if the central bank or the Development Bank assumes the risk of refinanced loans, since the current risk assessment standards will continue to limit the independent participation of small banks in the implementation of PPP projects.

Securitization of loans or their "packing" in infrastructure bonds included in the pawn list can not only increase liquidity in the banking sector, but also provide a reduction in risks for potential creditor banks, encouraging their participation in infrastructure projects. At the same time, for those cases where project participants are unwilling or unable to enter the capital market, you can use the mechanism for attracting bank funds against infrastructure investment bills ("pay-as-you-go") by the design organization, which is also cheaper, than the bond issue.

Institutional investor funds can be used to implement PPP projects as a resource source by purchasing infrastructure bonds or crediting them to infrastructure deposits (Israel's experience in organizing mixed financing by combining consortium bank loans and a syndicated loan using pension assets in transport infrastructure projects [5, p. 13]).

The involvement of pension assets in the process of implementing infrastructure projects is dictated by the fact that such projects are by their nature long-term, which in most cases allows to achieve the optimal balance between risk and return. This is evidenced by the increase in the share of pension assets invested in infrastructure bonds in a number of economically developed countries: in Australia 4-18%, Great Britain 5-15%, Canada 15-30%. At the same time, investments in long-term infrastructure projects provide pension funds with a stable income and tax benefits (in some countries, the yield on infrastructure bonds reaches 40% per annum) [6, p. 43], and also minimization of risks in comparison with risks on financial instruments traded on stock markets. One of the principal conditions for the use of pension fund funds and budgetary funds in the implementation of PPPs is the creation and operation of the Public Council, which would include representatives of the media, NGOs, various groups of the population, whose main task will be to monitor the progress of projects and the targeted use of allocated funds.

An alternative tool for attracting long-term resources of institutional investors and savings of the population can be special infrastructure savings deposit accounts, non-taxable and secured with a state guarantee, interest payments for which are indexed in accordance with the rate of inflation, due to which long-term loans are provided only for the development of social or economic infrastructure, secured by guarantees of a development bank for a period of 25 years (experience of France).

The effectiveness of the bank lending process within the framework of PPP projects in the practice of foreign countries is directly related to the system of guarantee support of such projects by the state for loans issued by banks that are traditionally in demand and do not require the immediate alienation of budget funds. For example, in India, the total amount of state guarantees on bank loans to the real sector reaches 15% of the country's GDP, and in Russia and Kazakhstan this indicator does not exceed 1% of GDP [7]. Therefore, a wider use of guarantee mechanisms in the process of implementing PPP projects can be an important factor ensuring the growth of bank participation in the development of the national economy.

In particular, we consider it expedient to supplement the mechanism of interaction between the banking and real sectors in the infrastructure sector with the creation of the Fund for the Insurance of

Credit Risk of Banks (the Fund), lenders of non-primary sector of the economy. Due to the fact that banks themselves insure their risks by creating provisions, the Fund will act as a reinsurer, and its authorized capital may be formed not with 100%, but with 50% participation of the state. The sources of the resource base of the Fund may be the funds of the National Fund, the required reserves of second-tier banks stored in the central bank, as well as insurance contributions by the banks themselves. In this case, the object of insurance is only long-term loans over 5 years, directed to long-term infrastructure and innovation (in the case of innovation) projects of enterprises and industries of non-primary sector with the condition that the Fund's funds can be used only in case of complete use of bank reserves to cover damages. When calculating the credit limit and insurance of a potential borrower, the results of the assessment of the liquidity of its assets are taken into account. Depending on the industry sector, individual factors can be used for each group of assets. In addition, to ensure a fair risk assessment, it is necessary to develop a risk assessment methodology that differs from the practice of commercial banks, taking into account the specifics of basic industries.

In order to ensure the transparency of the distribution of the Fund's funds, the decision on insurance payments should be taken collectively, for example, in the person of a specially created Expert Council, which will include representatives of the financial regulator and the banking community. At the same time, the responsibility of the Fund's managers and members of the expert council should be legislatively fixed in order to prevent the use of funds in corruption schemes.

As an alternative to the guarantee support of the real sector entities from the state in the framework of the infrastructure direction of the PPP in the interaction of the banking and real sectors of the economy, the use of the affordability tool, which provides for the payment of compensation by the state to a private business representative in the form of investment and operating costs and also remuneration for the management of the concession object in equal payments. However, in order to improve the mechanism using this tool from the standpoint of taking into account the risks of both private business entities and the state, we believe that payments should be made in proportion: 50% of the total payments during the entire term of the concession agreement in the framework of projects, for which weak cash flow generation is predicted and the remaining 50% is expected after completion of the project, as a fee for readiness, the quality of the concession object. An important role in increasing the attractiveness of infrastructure projects belongs to ensuring the most favored regime for banks, actively interacting with enterprises of the real sector in the form of compensating for the difference between market and preferential interest rates. And if in the world there is a decrease in the use of this type of financial instrument due to an increase in the volume of the stock market (only 3% of government support programs in OECD countries use interest rate compensation), then for Russia and Kazakhstan the use of a subsidy tool in the context of the implementation of industrial-innovative programs development, is one of their promising due to the weakness of the stock market. In Russia, interest rate subsidies for investment loans are used in the sectors of agriculture, food industry, transport and communications, construction and SMEs. At the same time, the subsidy scheme for loans attracted by enterprises for the reconstruction and renovation of production facilities provides for a compensation of 3/4 of the interest for using the loan within 1 year. Kazakhstan also has a scheme of partial subsidization of interest rates on loans from banks from the state budget, according to which the state compensates for loans from 5% to 8% with a maximum period of 3 years for loans, and for loans to SMEs with a market interest rate up to 50 % interest rate, both for existing enterprises and for new projects with a maximum term of up to 7 years.

At the same time, under pressure from a number of macroeconomic factors, resource base sources rose again, which cannot but affect the true market value of banking resources for enterprises, whose value exceeded 30%, which reduces the effectiveness of subsidy instruments. Therefore, in order for the measures taken by the state support within the infrastructure direction of the PPP to work on the result, in our opinion, it is necessary to significantly expand the number of banks willing to participate in the implementation of long-term infrastructure projects based on the following conditions: mandatory accounting of the market value of bank loans ; prolongation of the loan period for up to 10 years; exemption of participants (and banks and enterprises) for the first two - three years from obligatory payments; the placement of temporarily free funds of the state to deposit accounts of banks, the accrued interest on which can be used to increase subsidies or make compensation payments from the budget [8, 9].



Tax incentives that can be granted to subjects of interaction in the process of implementing infrastructure projects should be considered as another tool for stimulating action. The system of privileges established by the tax code of Russia and Kazakhstan (exemption from taxation of certain categories of taxpayers, reduction of tax rates, targeted tax incentives, including tax investment loans, the provision of tax holidays and preferences, exemption from taxation of individual elements of the taxable item, etc.) view, is not focused on the end result of work of both banks and enterprises of the real sector, which is typical of foreign tax practice, when tax for at least 5 years exempt companies that demonstrate productivity growth while increasing employment and improving capacity utilization, and at the same time tax breaks are provided for banks as their investments in promising sectors of the innovation sector increase [10].

**Conclusion.** Thus, in the conditions of Russia and Kazakhstan, taking into account the Eurasian Economic Union [11-15], debugging the mechanism of interaction between the banking and real sectors of the economy in the framework of the implementation of the infrastructure direction of PPP requires the following measures using legal, organizational, administrative, financial and credit instruments:

– in a single law on PPP should be fixed conditions of PPP - agreements in the framework of anti-crisis, infrastructure and innovation direction of PPP, the procedure for distributing risks between participants and the extent of their responsibility, including at the regional level;

– provide for a change in the structure of the investment portfolio of sovereign funds in favor of the national economy so that at least 40% of these funds, according to the proportion of the “golden section”, which serves as an indicator of stability, sustainability and harmony, should be distributed among the main areas of PPP;

– changes should be made to the prudential standards of the central bank, in terms of recognition of guaranteed payments by the state in PPP transactions as “solid collateral for commercial banks based on the inclusion of state concession obligations and a guarantee of consumption by the state in the first group of banks' assets weighted by credit risk and also to differentiate the norms for the formation of reserves in relation to banks of various levels that are actively working in the innovation sector.

**М. Құттыбай, Н. Дәулетбаева, Е. Орынбасарова, А. Каменова**

#### **МЕМЛЕКЕТТІК-ЖЕКЕМЕНШІК ӘРІПТЕСТІК НЕГІЗІНДЕ ИНФРАҚҰРЫЛЫМДЫҚ ЖОБАЛАРДЫ ҚАРЖЫЛАНДЫРУДЫҢ ӘЛЕМДІК ТӘЖІРИБЕСІ**

**Абстракт:** Мақалада Қазақстан жағдайында қолдану мүмкіндігін анықтау мен мемлекеттік-жекеменшік әріптестік негізінде инфрақұрылымдық жобаларды қаржыландырудың әлемдік тәжірибесі қарастырылған. Мемлекеттік-жекеменшік әріптестікте тігін пайдалану негізінде қаржыландырудың, қолдаудың ерекшеліктерінің және экономиканың банк және нақты секторларының өзара іс-қимылының пайдаланылатын схемаларының болуына қарамастан, олардың өзара іс-қимылы мемлекеттік институттың қатысуымен міндетті болып отыр, оның мақсаты кепілдік, сақтандыру, субсидиялар, салықтық жеңілдіктер және т.б. сияқты баламалы құралдарды пайдалана отырып өзара іс-қимыл процесін қолдау болып табылады. Ресей мен Қазақстан жағдайында Еуразиялық экономикалық одақты ескере отырып, мемлекеттік-жекеменшік әріптестіктің инфрақұрылымдық бағытын іске асыру шеңберінде экономиканың банктік және нақты секторларының өзара іс-қимыл тетіктерін дамыту бойынша ұсыныста ржасалды.

**Түйін сөздер:** мемлекеттік-жекеменшік әріптестік, инфрақұрылымдық жобалар, әлемдік тәжірибе.

**М. Құттыбай, Н. Дәулетбаева, Е. Орынбасарова, А. Каменова**

#### **МИРОВЫЕ ПРАКТИКИ ФИНАНСИРОВАНИЯ ИНФРАСТРУКТУРНЫХ ПРОЕКТОВ НА ОСНОВЕ ГОСУДАРСТВЕННО-ЧАСТНОГО ПАРТНЕРСТВА**

**Аннотация:** В статье рассмотрены мировые практики финансирования инфраструктурных проектов на основе государственно-частного партнерства с определением возможности применения в условиях Казахстана. Установлено, что несмотря на наличие особенностей финансирования, поддержки и используемых схем взаимодействия банковского и реального секторов экономики на основе использования механизма государственно-частного партнерства, их взаимодействие происходит непременно при участии государственного института, целью которого является поддержка процесса взаимодействия с

использованием таких альтернативных инструментов как гарантии, страхование, субсидии, налоговые льготы и т.д. В условиях России и Казахстана с учетом Евразийского экономического союза предложены рекомендации по развитию механизмов взаимодействия банковского и реального секторов экономики в рамках реализации инфраструктурного направления государственно-частного партнерства.

**Ключевые слова:** государственно-частное партнерство, инфраструктурные проекты, мировой опыт.

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**REFERENCES**

[1] On the application of prudential standards with respect to the infrastructure sector: [directive of the Reserve Bank of India of April 23, 2010]. [Electronic resource] // Reserve Bank of India. - URL: <http://www.rbidocs.rbi.org> (access date: 09/17/2018).

[2] Ganelin, M. (2014), Infrastructure of Russia. Big ship - great swimming. [Infrastructura Rossii. Bolshomukorablubolshoeplavanie. Analyticheskiy otchet Gazprombanka] Moskva: Gazprombank. P. 5-6. (In Russian)

[3] Kondratiev, V.B. (2010) Infrastructure as a factor of economic growth [Infrastrukturakak faktorekonomicheskogorosta] Russian entrepreneurship, №11. P. 29-36. (In Russian)

[4] Bogetic, Z. (2006) Forecasting Investment Needs in South Africa's Electricity and Telecom Sectors. South African journal of economic, Vol. 74, Iss. 3. P. 530-556.

[5] Public-private partnership in Israel [Gosudarstvenno-chastnoepartnerstvo v Israile] [Elektronnyy resurs] / Tsentr for Public-Private Partnership of Vnesheconombank. - URL: <http://www.pppcenter.ru> (access date: 01/17/2018)

[6] Berenda, Y. (2012). Pension money as a source of financing of long-term investment projects in the economy [Pensionnyy dengi kak istochnik finansirovaniya dolgosrochnykh investitsionnykh proyektov v ekonomike], Securities Market, №5 (423), P. 42-44. (In Russian)

[7] Shvetsov, Yu.G. (2013) A bank as a participant in a public-private partnership in investment processes [Bank kakuchastnik gosudarstvenno-chastnogopartnerstva v investitsionnykh protsessakh], Problems of Finance and Accounting. №1(9). P. 27-33. (In Russian)

[8] Merzlov, I.Yu. (2013) Features of the use of banking investment technologies in public-private partnership projects [Osobennosti primeneniya bankovskikh investitsionnykh tekhnologii v proyektakh gosudarstvenno-chastnogopartnerstva] Fundamental research. №6. P. 953-957. (In Russian)

[9] Galantseva, I.V., Akhmedzyanova F.K. (2012) Study of the sources of contradictions between the financial and real sectors and determination of approaches to their solution [Issledovanie istochnikov protivorechiy mezhdu finansovym i realnym sektorami i opredelenie podkhodov k ikhresheniyu] Bulletin of Kazan Technological University. T.15., №12. P. 266-270. (In Russian)

[10] On project financing and securitization: [the law of the Republic of Kazakhstan of February 20, 2006. No. 126-III]. [Electronic resource] // IP "Lawyer". - URL: <http://www.online.zakon.kz> (access date: 09/17/2018)

[11] About the Eurasian Economic Union: [the contract was signed in Astana on May 29, 2014]. [Electronic resource] // ATP ConsultantPlus: Legislation: Version Prof. - URL: <http://www.consultant.ru> (access date: August 27, 2014).

[12] Taubayev, A.A.; Dosalieva, B.B.; Akyenov, S.Sh. (2016) The role of the social-entrepreneurship corporations in Kazakhstan in the development of the public private partnership mechanisms. Bulletin of Taras Shevchenko National University of Kyiv. Economics. №6(183), p.15-22. <http://dx.doi.org/10.17721/1728-2667.2016/183-6/3>

[13] Taubayev, A.; Akenov, S.; Ulybyshev, D.; Kernebaev, A (2017) Institutional support of agro-industrial complex entities of quasi-public sector of Kazakhstan. Journal of Advanced Research in Law and Economics, Volume VIII, Issue 4(26), Summer 2017. pp. 1560-1565. DOI: [10.14505/jarle.v8.4\(26\).35](https://doi.org/10.14505/jarle.v8.4(26).35)

[14] Dyussebekova G.S., Beisembayeva G.M., Bayandina G.B., Burgumbayeva S.K. Analysis of the interdependence of entrepreneurship development and the growth of population employment within the realization of state programs. Bulletin of National Academy of sciences of the Republic of Kazakhstan ISSN 1991-3494 Volume 4, Number 374 (2018), 111 – 121

[15] Sanaliev L.K., Kengzhegalieva G.B., Idelbayeva A.S., Niyazbekova Sh.U. Investigation of modern economic mechanisms for construction of the intellectual potential of the country as a moving factor of innovative economic development. Bulletin of National Academy of sciences of the Republic of Kazakhstan ISSN 1991-3494 Volume 5, Number 375 (2018), 144 – 149 <https://doi.org/10.32014/2018.2518-1467.19>

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