Placement of social bonds through crowdfunding: global trends and prospects for implementation in domestic practice

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Abstract: The article considers the possibility of using additional sources of financing in the construction and operation of social infrastructure facilities. We are talking about the use of social bonds. The idea belongs to the International Capital Markets Association (ICMA), where the issue of social bonds is designed to solve specific problems of society, ensuring the saving of public funds. The issue and circulation of social bonds must comply with a number of principles: the mandatory use of funds from the placement of these bonds for the development of the company, special criteria for the selection of projects of social impact and assessment of social effect, requirements for disclosure of information and its transparency. At the same time, it is necessary that investment projects are aimed at achieving positive social results that can be quantified. An attempt was made to develop measures to combine the instrument of social bonds and the principles of investment crowdfunding for the accumulation of funds by municipalities. The theoretical and methodological basis of the study was the work of domestic and foreign scientists in the field of analyzing government debt obligations to expand investment in infrastructure facilities at the regional and local levels, as well as research on the use of crowdfunding in the implementation of non-capital-intensive investment projects. The information base of the study was compiled by analytical reviews of the National Center for Public-Private Partnership, data from domestic statistics, analytical reviews of the Bank of Russia.

1 Introduction

The lack of investment in social infrastructure continues to hinder the socio-economic development of the Russian Federation, without providing conditions for the intensification of entrepreneurial activity and the growth of the quality of life. Public-private partnership is actively involved in the process of creating and reconstructing infrastructure facilities in general, and social infrastructure, in particular. The main brake is the lack of funding due to the low profitability of potential projects. In recent years, the Russian PPP market in the social sphere has shown steady growth both in terms of quantity and in terms of attracted investments. In the field of social infrastructure in 2021, 530 PPP projects were implemented in the amount of 394.2 billion

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rubles. As of the end of 2022, 680 projects with a total amount of financing of 244 billion rubles[1-15].

The world practice of creating and reconstructing urban infrastructure testifies to the complex of financial instruments used for this. Revolver funds, municipal bonds are considered the most promising; green, perpetual and social bonds; mechanisms for attracting funds from institutional investors; crowdfunding and others.[2]

The experience in the use of social investments in the implementation of projects for the reconstruction of social infrastructure facilities and their placement on digital platforms, i.e. the use of crowdfunding, is interesting. In Russia, there is no practice of using this tool for municipal projects, where there is an alliance of business and the state. Therefore, this aspect of the investment process seems to be relevant.

Thus, the scientific community is trying to analyze and assess the prospects for the introduction of debt obligations as sources of investment for public-private partnership (PPP/MFP) projects, especially in the field of social infrastructure. Here we can note such authors as Kalinin N.V., Medvedeva T.V., Romitsyna G.A., Hulukshinov D.E., Sidorenko E.N., who explore the possibilities of introducing infrastructure and other bonds into the practice of PPP relations in social industries.[3, p. 53-56, 4, p. 75-78, 5, p. 344-348].

The specifics of social bonds are considered within the framework of sustainable development in the works....

Uses for investing in the social infrastructure of social bonds are explored in the works of Dear A., Helbitz A., Littlefield E.[6, p. 90, 7, p. 120]. In recent years, thanks to widespread digitalization, interest has arisen in scientific work devoted to crowdfunding, expanding the sources of financing for non-capital-intensive investment projects. Western scholars (Benna, U. G., Benna, A. U., Avilla B.) consider crowdfunding in the context of sustainable urban infrastructure development.[8, p.342, 9, p.70]. Gasparro K. links project financing and crowdfunding as a common source of infrastructure investment.[10, p.16].

Domestic researchers (A.A. Firsova, K.L. Neopulo, I.S. Popov, N.I. Lyakhova and others) justify the problems and prospects of crowdfunding as a way to finance investment projects.[11, 12, pp.129-136, 13, pp.64-68].

2 Materials and methods

The purpose of this article is to study the prospects for the use of social bonds and crowdfunding as additional sources of financing investment projects in the field of social infrastructure at the municipal level.

To implement the goal, the following tasks are set:

- clarify the features of social bonds in the context of sustainable development;
- disclose the principles of the relationship between business and power when using the instrument of social bonds;
- justify the need to use crowdfunding to place social bonds when implementing investment projects in the social infrastructure at the local level;
- develop recommendations on the creation of a mechanism for interaction between participants in investment activities.

The theoretical and methodological basis of the study was the work of domestic and foreign scientists in the field of analysis of debt obligations issued by the state and municipalities to expand investment in infrastructure facilities at the regional and local levels, as well as research on the use of crowdfunding in the implementation of non-capital investment projects. The information base of the study was compiled by analytical reviews of the National Center for Public-Private Partnership, data from domestic statistics, analytical reviews of the Bank of Russia. The article used such general scientific methods...
3 Discussion

The emergence of social bonds is associated with the concept of sustainable development, in line with which the concept of sustainable investment has been formed, focused more on business behavior. Entrepreneurs began to focus on saving human resources and reducing labor intensity to increase profits. The concept of "ESG factors" has appeared. ESG (Environmental, Social and Governance) is a term meaning a new type of governance - environmental, social and corporate governance. This concept is used by investors to evaluate companies in three aspects: environment, social development and governance. The environmental aspect takes into account the impact of the company’s activities on the environment. The social aspect includes the well-being of employees and local communities, and the management factor takes into account such components as corruption, business ethics, gender composition, remuneration of top managers.

The impact of environmental, social and management factors on the profitability of companies and how combining all this can contribute to solving sustainable development problems is considered. Since 2016, the total value of assets in the world under management in funds using ESG data has increased from $22.9 trillion to more than $40 trillion in 2020. Financial markets began to adapt to new challenges. Financial instruments such as green, social, blue, sustainable and other bonds have emerged, allowing investors to invest in environmental and social projects. Green bonds were first issued by the European Investment Bank (2007) and the World Bank (2008) in order to accumulate funds to mitigate climate problems. Blue bonds are aimed at protecting the world’s oceans, social bonds are aimed at solving social problems. Sustainable bonds are intended to finance combined environmental and social projects aimed at improving the long-term life of large groups of the population of both individual countries and entire macro-regions. The market for these financial instruments in the world is steadily growing.

At the beginning of 2020, issues on green, social and sustainable bonds amounted to over $320 billion, which is almost twice as much as in 2017. At the same time, green bonds remain the most attractive sustainable financial instruments - 78%. Social bonds are targeted debt obligations, the funds from which go to solve social goals, which can be the construction and reconstruction of housing, schools, medical institutions, etc.; increasing access to health care, secondary and vocational education; financing of small and medium-sized enterprises focused on the creation of food and social services; improvement of sanitary conditions, etc.

In modern practice, social bonds are one of the forms of implementation of public-private partnership (PPP), where the state and the investor (organizer, executor) of the social project are involved. The relations between the parties are formed in this way: the state initiates a solution to a certain social problem, announces an investor contest. The investor organizes and finances the implementation of a social project, the results of which have clear assessment criteria (quantified social effect). Budget funds are transferred to the investor only if such an effect is achieved. This allows the state to shift the costs and risks of social programs to third parties - investors and at the same time not risk budget funds.

The specificity of social bonds, in international practice they are called Social Bond Principles, is their mandatory compliance with the principles of the international organization International Capital Markets Association (ICMA). The principles include: the means of emission should be used to solve socially significant problems;
the investor ensures transparency of the procedures for selecting, evaluating and implementing the project; a special scheme of funds management is applied, providing guarantees of their intended use, i.e. funds from the placement of bonds are recorded in a separate account; when implementing the project, the investor regularly publishes reports on the spending of funds and on the achieved intermediate results.\[16\]. Compliance with these principles is assessed by independent organizations - for example, in Russia these are the rating agencies Expert and ACRA. According to ICMA requirements, the circle of issuers of social bonds is also regulated. These are public organizations represented by development institutions, international organizations, non-profit funds, regional development banks. These are state and local governments that, through the issue of social bonds, can raise funds to solve social problems. The social significance of projects, offering investors lower profitability, helps to save on debt servicing, ensures the stability of discounted income in the medium term. The return on investment is actually guaranteed by the public side. Also, the issuers of these bonds can be corporations, social bonds provide them with a good reputation, allowing them to form long-term development plans.

The existing international experience of using social bonds by type of obligations allows to distinguish the following types:

- classical bonds have a face value and a coupon, guarantee income;
- project financing bonds, here the funds raised are stored and used in special accounts of the created project company, which makes it possible to distribute risks;
- securitized social bonds are backed by various assets, including loans, they are purchased only by qualified investors (funds, banks, insurance companies);
- structural bonds are complex multilateral contracts, where, in addition to the issuer and investor, an independent valuation company acts as a guarantor, financial intermediaries, direct project executors.

Russia has also joined in the creation of new financial instruments to expand investment opportunities for low-income social projects, where an alliance of power and business is being formed to one degree or another. The application of social bonds is regulated by the Government Decree "On the organization of pilot testing by the constituent entities of the Russian Federation in 2019-2024 of social impact projects." Vnesheconombank is the operator of all such projects [17].

In modern conditions, social bonds are considered as an effective tool for additional financing of infrastructure projects [18., 19, p. 257-259].

The first issue of social bonds was initiated by SFO Social Development LLC in 2020 to implement "Improving the educational results of students of the Republic of Sakha (Yakutia)." In 2021, the same organization issued corporate social bonds to refinance a PPP project in the field of education and culture, and Russian Railways issued social Eurobonds in the field of improving transport accessibility, medical and educational services.
The operator of social projects and the guarantor of their implementation is Vneshecon Bank of the Russian Federation.

To date, all information on the issue of green, social and other targeted bonds of Russian issuers is contained in the database of the Russian non-profit organization INFIRAGREEN. The INFRAGREEN register contains 42 issues with a total volume of about 533 billion rubles [20].

Among the issuers are SFO Social Development, Bank ДОМ.РФ JSC, ROSBANK PJSC, INK-Capital JSC, SOPF Infrastructure Bonds, MTS PJSC and others.

The peculiarity of the placement of social bonds is the need to verify a specific issue of social bonds or a social project, for the financing of which the received funds will be used. This is necessary to bring them in line with ICMA principles.

For Russian bonds, the assignment of the status of "social" is possible subject to the additional requirements of regulation and the standards of issue of the Central Bank. According to Russian standards, only a project, not a bond, can be recognized as "social."

To be included in the Segment of "social bonds" of the Moscow Exchange, compliance with the following requirements is required:
- the existence of an independent external evaluation of the release or draft of compliance with the internationally recognized PSA;
- obligatory registration of bonds by the Bank of Russia with additional identification of "social bonds."

In the Russian Federation, social bonds have not yet received wide development, although, as world practice testifies, they have a fairly good investment potential. You can attract a large number of small non-professional investors seeking to help solve specific social problems in the territory of their residence and at the same time earn a little extra money. Since the guarantor of these bonds is the state or development corporations, this reduces risks and allows you to calculate future income, since the coupon yield on these bonds is determined in advance.

But there are also disadvantages. It is possible not to achieve the set goals by the project executor, this is a general risk characteristic of any financial instruments. Social bonds can be difficult to structure, refunds for incoming instruments are not guaranteed and depend on different project results. An investor might just lose money. Social bonds have a low yield compared to other financial instruments. According to experts, their average annual yield is 15 basis points lower than on regular bonds. The S&P 500 bond index brings in 2.37% per annum in dollars, while the green bond index brings in 1.84% per annum [21].

However, it is important to develop this tool, especially when it comes to small social projects of the local level (landscaping of streets, parks, construction of cultural and sports centers, etc.). Local authorities are limited in funds, and therefore the emergence of new sources of investment could significantly expand their capabilities. For such cases, it is proposed to use crowdfunding to place social bonds.

Crowdfunding is a relatively new method of raising funds for Russia, but quite involved in world practice when it comes to raising funds for startups and non-capital-intensive investment projects. This is a collective investment to support socially significant projects, where mainly individuals act as an investor. Crowdfunding requires a digital platform that plays the role of an aggregator of investment offers. The initiator (municipality) of the social project on the platform begins to raise funds/attract investments with a given target amount of financing through the placement of its bonds. Social bonds are directly purchased by platform users. The amount of funding provided by users is retained by the platform until the goal of issuing social bonds is achieved - collecting the required amount. If the amount is collected, the funds are written
off from the accounts of individuals and come to the disposal of the project owner, thus deliberately unsuccessful projects are eliminated. A mandatory requirement is to warn the digital platform that such investments can be speculative, are low liquid and have high risk.

But what makes them popular with companies and potential donors looking to improve their territory's quality of life? For the implementation of small social projects, you can find performers, but usually they do not meet the requirements for placing their securities on the stock exchange, i.e. they cannot use debt instruments.

Banks are also wary of investing in low-liquid risk assets, forcing companies to look for new sources of financing. In addition, in some countries, income generated by users of investment crowdfunding platforms is exempt from taxes.

The crowdfunding of infrastructure and PPP projects varies in terms of the types of financing and specialization of digital platforms. So, there is charitable crowdfunding, which does not imply a return on investment, but ensures any non-financial benefits, and investment crowdfunding, aimed at a return on investment. It, in turn, is divided into debt and equity:

- debt crowdfunding involves investments in bonds or participation in granting loans when the platform operator acts as a creditor to the project on behalf of users;
- equity crowdfunding means an investment in the shares of a project company or participation in a mutual investment fund.

In this study, it is proposed to use investment debt bond crowdfunding, because social bonds for investment will be placed on the digital platform. World experience shows that the viability of such a mechanism is based on the possibility of attracting a large number of investors, broad support of society in the early stages of the project implementation, the possibility of selecting promising projects, since only projects that have successfully carried out a crowdfunding campaign receive budget support.

In Russia, the formation of the crowdfunding market began back in 2015. Starting in January 2020, it is regulated by the Federal Law of 02.08.2019 No. 259-FZ, which defines the methods of crowdfunding investment and the requirements for crowdfunding platforms.

The growth dynamics of the crowdfunding market is shown in Figure 1. The growth until 2020 was caused by the absence of regulators of this market, as well as the fact that the charity segment was increasing. The first market analysis was carried out by the Bank of Russia at the beginning of 2020. During this time, he showed high growth rates: if in 2020 the volume of funds raised amounted to 7 billion rubles, then in 2021 almost twice as much - 13.8 billion rubles. This is due to the influx of borrowers - small and medium-sized businesses (SMEs) affected by the pandemic. At the beginning of 2022, the crowdfunding market decreased by 2.4 billion rubles, or 42%, compared to the IV quarter of 2021. But already at the end of 2022, the market continued to grow and reached 20.4 billion rubles. At the beginning of 2023, the market increased by 77% and reached 36.108 billion rubles.
Until 2020, the number of crowdfunding companies also steadily increased (Figure 2), but with the introduction of the law, the requirements for the information platforms themselves and the companies operating them tightened. In 19.06.2023, 76 investment platform operators were registered in Russia. In accordance with the law, through crowdfunding, entrepreneurs and legal entities can attract up to 1 billion rubles financing per year, and the amount of investment available to individuals is limited to 600 thousand rubles per year. Therefore, crowdfunding has prospects for development, therefore, the following scheme of interaction between participants in investment activities at the level of local authorities in the Russian Federation is proposed (Figure 3).

An agreement on the creation (reconstruction) of a social infrastructure facility is signed between private and public (municipality) partners, according to which business undertakes to invest its investments at all stages of the project implementation. The municipality proposes and justifies to the state agent the need to issue social bonds for the subsequent compensation of invested investments. The state agent is a representative of the interests of bondholders. If successful, an issue agreement is signed, and social bonds are issued by the municipality, which are placed on the crowdfunding platform and are subject to sale to its users. The collected funds are accumulated on a special account. After the completion of the social project, an independent audit is necessarily carried out to achieve the set goals. If the goals are achieved, funds are transferred to the expense of return on investment.

Of course, the use of crowdfunding has certain limitations. This is the presence of debugged digital platforms characteristic of densely populated areas with a fairly high level of income for the population. Such a mechanism is not available for poorly developed peripheries. Then this is one of the possible sources of compensation for invested investments, it is natural that infrastructure capital investments will require large funds than digital platforms will collect. Therefore, social bonds can rotate as standard municipal bonds, and current repayment options apply to them. Thus, to finance unprofitable projects: repair of general roads, improvement of squares and parks, construction of kindergartens and schools, etc., general bonds are issued, which are accordingly redeemed from the general income base of the municipality.
Fig. 3. Scheme of interaction of participants in investment activities at the level of local authorities in the Russian Federation

If social bonds are issued for co-financing projects of municipal-private partnership (MCP), provided with stable demand (housing and communal services, rental housing, etc.), then they will be repaid at the expense of income from the implementation of the project.

In general, the characteristics of these social bonds should be the same as for existing municipal bonds. They have an average repayment period of 5 to 7 years. Coupon rates are tied to the key rate of the Central Bank and range from 5.7% to 14%. These are medium-term bonds with a fixed rate of quarterly coupons and a nominal value of 1000 rubles at placement. Municipal bonds are not highly liquid securities. The reasons for this are explained by the fact that the few first owners of municipal bonds do not show activity in the secondary market. As a rule, some investors, having bought bonds in the primary market, only for the first time, put up applications for the sale of these bonds, trying to make money on the difference in prices of the primary and secondary markets, and some investors, having bought bonds in the primary market at a favorable price, keep them until maturity.
The reasons also include the lack of interest of municipal bond issuers in maintaining the high liquidity of the placed bonds. Their main goal is to receive funds to fill the budget and solve regional problems. The advantage of such bonds is their reliability, since they have government guarantees as collateral. It does not matter how the price of municipal bonds will change during the period of their circulation to the RCB, the invested money will be returned to investors on time, based on the face value of the bonds or its gradual schedule for repayment of the face value. Until 2021, the advantage of municipal bonds was that coupon income was not taxed, but since 01.01,2021 this benefit was canceled, individuals pay personal income tax 13%. But at the same time, regular payments on the coupon of municipal bonds help investors create passive income strategies or strategies for reinvesting coupon income. Crowdfunding is to some extent an alternative to banking financial instruments. Lower deposit rates are forcing the search for other investment opportunities. This not only develops the economy, but also contributes to the emergence of innovation. Holders of social bonds independently evaluate the proposed projects, choosing which one to support. The placement of social bonds by municipalities on digital platforms can become an additional source of financing for low-income social projects, which will definitely have the potential for implementation, since they will be confirmed by their significance for the population through the collection of the declared amount. Therefore, the investor will already have a chance to undergo an independent examination of the created object and return the invested investments. Crowdfunding is a convenient financial tool that allows you to track the demand for certain social services or facilities in real time, accumulate funds for projects that, due to their ambiguity or excessive innovation, have not found support from traditional investors.

4 Conclusions

The development of the country's economy and regions is constrained by the state of infrastructure in general, social, in particular. Infrastructure projects require significant investments, and therefore it is advisable to diversify their sources, and therefore expand the financial instruments used. The use of social bonds and crowdfunding as additional sources of financing in relation to the implementation of municipal projects for the creation (reconstruction) of social infrastructure facilities seems timely. Moreover, not only PPPs are developing in the regions, but also a municipal-private partnership (MFP). Local governments offer a large number of such projects, but due to the fact that they are low-income, it is quite difficult to find an investor. Therefore, it is necessary to look for new forms of support and new forms of relations between government and business. These are social bonds, the emergence of which is associated with the concept of sustainable development adopted by developed countries. The main thing in this financial instrument is how the funds raised as a result of the issue participate in improving the life of the population. For local authorities, this is an additional opportunity to intensify investment activities on its territory, increase its own budget in the future, and improve the quality of life. Moreover, funds from social bonds are transferred to the investor only after achieving the stated goals. Thus, budget expenditures are reduced and production and financial risks are reduced. Social bonds are already rotating on the Russian securities market, their movement is regulated by the corresponding regulatory framework, but in domestic practice they are still not widespread. This tool needs to be developed as it can provide an influx of investment for small local-level social projects. Also, for such projects, the crowdfunding option, a
The viability of such a mechanism is based on the possibility of attracting a large number of investors, broad support of society at the early stages of the project implementation, the possibility of selecting promising projects, since only projects that have successfully gained the necessary amount receive budget support. In general, interaction between the state, business, holders of social bonds can be built in this way: an agreement is signed between municipal authorities and a private investor on the implementation of a social project in the field of infrastructure. The investor undertakes to reconstruct (create) such an object, seeking various means for this. The municipality develops an agreement on the issue of social (municipal) bonds, after the relevant procedures issues them. The trading platform is a digital platform, which then implements a crowdfunding mechanism. The collected funds are recorded on a special account. The successful completion of the social project, confirmed by an independent audit, becomes a signal for the transfer of funds to the investor. This may be in addition to another way to return on investment, but in any case, a private partner has an additional incentive.

This kind of crowdfunding certainly raises questions. What will happen if, for objective reasons, the project is not implemented or half implemented? If the project at the first stage scored the necessary amount on the digital platform, which indicates confirmation of its significance for the population, but then something did not allow it to be completed. Funds from the platform are returned to bondholders, but what about the investor who invested in the object? A guarantee fund is needed, which can be a regional development fund or another institution with similar functions. It is necessary to guarantee the return on investment in one form or another, if after successful crowdfunding, force majeure has arisen, not provided for by the agreement.

The application of crowdfunding has limitations. This is the presence of well-functioning digital platforms inherent in densely populated territories, where the population lives with a fairly high level of income, financially competent, with an active social position. This is typical for large cities and agglomerations. For other territories, crowdfunding is not applicable.

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