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## Municipal loans as a tool for solving the financial problems of the territory

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### Abstract

Issue of municipal bonds become a popular method of financing the deficit of local budgets. In the article the peculiarities of municipal loans of Moscow and Kazan, are identified shortcomings and proposed recommendations on increase of efficiency in the implementation of borrowing through bonds issue. Among the measures proposed by the author is significant, however the mechanism of public-municipal partnership.

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**Keywords:** budget deficit; investment; municipal loans; bonds; regional market of securities.

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### 1. Introduction

As you know, securities are the most effective tool to attract necessary for the Issuer of financial resources. Among the variety of types of securities are of particular interest bonds issued on behalf of municipal authorities, since the municipal territories are concentrated key resources of our country and the financial condition of municipalities, ultimately, affects the sustainable development of our state. Attention, in our opinion, deserve two municipalities - the city of Moscow and Kazan because they are capitals of Federal and regional significance, respectively, are centers of international sporting events, research and educational activity and in fact are basic investment and financial centers in the country. In this regard, it is important to analyze the conditions of issue and circulation of municipal bonds of Kazan and Moscow.

### 2. Data and Methodology

We have analyzed bond issues in the period July 2005 to December 2011.

Ratings of issuers in Fitch characterized by the following parameters [1]:

- as 21.08.2012 short-term credit rating of Kazan in foreign currency - B, as at 18.01.2013. short-term credit rating of Moscow in foreign currency - F3;
- as 21.08.2012 long-term default rating of Kazan in foreign currency - B+, as at 18.01.2013 short-term

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credit rating of Moscow in foreign currency is BBB;

- as 21.08.2012 long-term default rating of Kazan in national currency - B+, as at 18.01.2013 short-term credit rating Moscow in the national currency - BBB;

as 21.08.2012 long-term credit rating of Kazan on a national scale - A, as at 18.01.2013. long-term credit rating of Moscow on a national scale is AAA.

Obviously, loans of Moscow have a higher rating compared to loans of Kazan. Total borrowing by the administration of Kazan for the analyzed period amounted to 14.8 billion rubles, and the Government of Moscow - 455 billion rubles. The average volume of the bond loan by the government of Kazan was \$ 1.85 billion, the Government of Moscow - 21.6 billion rubles. We see that the average amount retained by the Government of Moscow financial resources more than 11 times the size of the loan Kazan.

Compare the parameters of the budgets of the two capitals. In 2013 the Moscow city budget planned deficit in the income 1517,9 billion rubles and expenditures in 1718,3 billion [2], and in previous years also witnessed a deficit. For 2013 the budget of the city of Kazan planned balanced when revenues 15,612 billion rubles and expenditures in 15,612 billion [3]. The income of the budget of Moscow of the order of 100 times the income of the budget of Kazan.

It turns out that the purposes of the bonded debt of the Government of Moscow are the financing of the budget deficit and optimization of budget revenues. And the administration of Kazan uses this tool primarily as a way of optimizing revenues of the budget.

Relative terms, the average term of borrowings by the administration of Kazan was about 30 months, and the Government of Moscow - more than 60 months.

The timing of the bond issue the Government of Moscow exceed twice the timeframe of the introduction by the government of Kazan resources. Longer terms of attracting financial resources reduce the burden on the budget, but at the same time they can increase the cost of servicing the bond issue, as income investors generally have to pay the longer and more often.

Bonds of Moscow and Kazan are in the index of municipal bonds of the Moscow exchange [4]. The yield of the securities represented issuers roughly similar, but there is a difference depending on the issue. We conclude that the Administration of Kazan and Moscow Government are active participants in the stock market. The main differences between their bond issues are timing and the amount of the loan. In this context, it is unreasonably low rating of municipal bonds of Kazan.

On the basis of article 14 of the Federal law "On General principles of organization of local self-government in the Russian Federation" dated 06.10.2003 №131-FZ to significant issues of local importance, in our view, should include:

- ensuring residing in the settlement and in need of accommodation for low-income citizens living areas, organization of construction and maintenance of municipal housing stock, the creation of conditions for housing construction, the implementation of municipal housing control and other powers of local authorities under the housing law;

- creation of conditions for providing transport services to the population and organization of transport service of the population within the boundaries settlements;

- creation of conditions to ensure that local residents have communication services, public catering, trade and consumer services;

- providing conditions for development on the territory of the settlement of physical culture and sports;

- organization and assistance in development of agricultural production, creation of conditions for development of small and medium enterprises.

Analysis of bond issues of Moscow and Kazan have shown that the specific purpose of attracting financial resources by municipalities are not installed.

It is true M. E. Ivanov's thinking about the possibility of using bond loans regions in the framework of implementation of important socio-economic projects [5].

Believe that the use of market instruments securities municipal entities should be associated with the decision of questions of local value indicated by us above, namely: to raise funds for the construction or purchase of apartments, houses for the poor, for the purchase of city vehicles, for creation of infrastructure facilities etc. With a resource base for the payment of income to investors on the bonds may be:

- lease payments from the rental built or purchased apartments, houses to needy citizens in the lease (with the right to purchase apartments, houses citizens);

- proceeds from the sale of tickets for travel by public transport;
- funds from the use of sports and socio-cultural infrastructure objects;
- etc.

### 3. Results

The example of the construction of houses will describe the implementation model of the task of issuing municipal bonds.

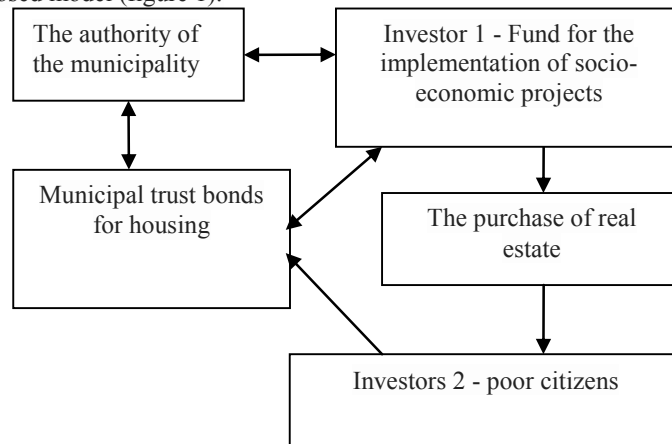
In the construction of residential houses investors can make poor citizens, and the amount of their investment would be equal to the initial payment for the purchase of residential property (apartments, houses). Define separate relevant parameters: the minimum down payment, term of payments (term of the bond issue), etc. Let's assume for Kazan. According to Thatstate average wages, accrued to employees of enterprises and organizations, including small businesses and community organizations, reporting 1 time per year, in January 2013. amounted 23042,1 rubles [6].

In Tatarstan, the subsistence minimum in the fourth quarter of 2012 identified in 5622 RUB [7].

Calculate the maximum possible net income of the inhabitant of Kazan in a month, based on the average wage and subsistence minimum, which will be 17420,1 RUB.

Average cost per square meter of residential property Kazan may 2013, the primary market is \$ 54672 rubles/square metre (sqm) [8].

The minimum size of a Studio apartment is about 35 sqm, i.e. the cost of one-room apartments on the primary market of Kazan starts from 1913520 RUB Dividing the minimum cost of an apartment on the highest possible net income of the inhabitant of Kazan will receive a value only slightly above 109 months, or about 9 years will require average resident of Kazan for the payment in installments of the price. Display graphically the proposed model (figure 1).



**Fig.1. Is the model of the issuance of the municipal bonds for the purchase of housing**

The proposed figure 1 mechanism involves the establishment within the municipality's non-profit Foundation established by the local authorities and accumulating financial resources of the local budget to address significant socio-economic challenges.

Usually housing low-income citizens is realized through social mortgage, in which citizens are required to have a minimum down payment, and the subsequent part is provided to them on credit at an interest rate close to the rate of refinancing of Bank of Russia.

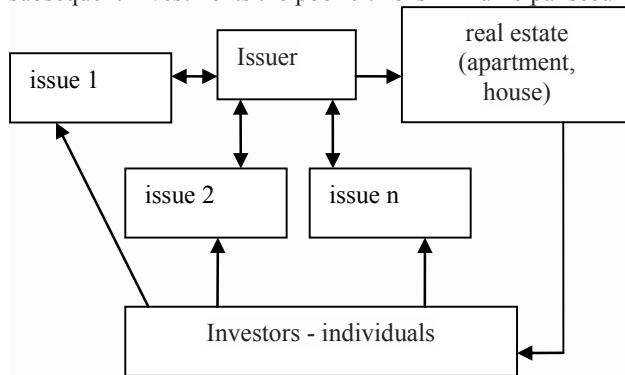
Our mechanism assumes no additional payments in the form of interest from individuals that will be compensated by the obligation of the Issuer to pay interest on debt securities will be offset in part by interest payments.

According to OJSC "Agency for housing mortgage lending RT", the main purpose of which is to participate in the establishment and functioning of the market system of providing affordable housing for citizens with average incomes at the expense of own means of citizens and long-term loans, the minimum down payment to purchase real estate through mortgage programs is 10% [9].

Believe it is possible to provide for a minimum amount of investment for low-income citizens in the

amount of 10%, this amount will guarantee the investor the possibility of obtaining a residential property during the period up to 1 year. Moreover, the greater the size of the down payment (investment), the shorter the waiting period for housing.

The remainder of the value of the donated property should be implemented in installments through subsequent investments the poor citizens in municipal securities. Schematically it looks like this (figure 2).



**Fig.2. The mechanism of acquisition and installment of housing investors in the face of the poor**

The advantages of our proposed model of the use of municipal bonds in the realization of the social functions of local authorities are:

- funds raised from issue of debt securities, will be used for the purchase or construction of a new housing, which also stimulates the real estate market, i.e. the loan has been highly concentrated;
- simplified mechanism for providing housing to low-income citizens through the acquisition last target municipal bonds and without the need for long-term waiting for the right to receive property under the social mortgage program and other similar programs;
- no additional fees besides the cost of real estate, because the unpaid portion of the property will be sold in installments through periodic purchases by citizens of new issues of similar securities;
- right real property proposed to leave for the local authority until full payment by the investors of a purchase price in installments of real estate;
- comply with the requirements of the law "On securities market", because instead of making payments of principal and interest on the bonds, the Issuer is issuing other property equivalent;
- in case of non receipt of the next payment due under the installment plan (does not purchase additional debt securities), the Issuer has the right to prepay their debt securities before the debtor (investor) only nominal value with simultaneous exclusion of the debtor from the list of persons seeking to obtain property or from the list of persons already residing in the property purchased;
- in addition to the poor the program is open to young families and large families to improve housing conditions;
- the involvement of the savings of private investors in the securities market.

Note that our proposed bonds with similar infrastructure, but they are aimed at the implementation of socially significant projects and involve the cooperation of local authorities with individuals. Effective implementation of our proposed model (figure 1) is impossible without the assistance of professional market participants and related support regulatory support in the form of decisions of local authorities.

Since a significant share of professional players on the Russian stock market are commercial banks, then the initial implementation of our model requires the involvement of banks controlled by the state authorities or municipal authorities and relevant reliability criteria of the Bank of Russia, which will act as underwriters [10].

Subsequently we consider possible involvement of other commercial banks in the process [11].

The implementation and handling of the municipal bonds should be implemented within the territory of the respective municipality. Thereby creating preconditions for the formation and development of municipal, and subsequently the regional markets of securities on the territory of the Russian Federation. Initial information technology platform for the implementation of the proposed model can act as an Internet portal for public/municipal services.

Basic optimal parameters of the municipal bond issues for our model are presented in table 1.

**Table 1. The optimal parameters of the trust's municipal bond offerings for Kazan**

Volume	Depends on the amount of funds pledged in the local budget for the relevant year
Value	Multiples of 1000 rubles the Issuer of the nominal value investors returns because funds are allocated for the purchase of real estate for investors.
Yield	The Issuer pays other property equivalent in the form of square meters of residential real estate
Term	On average 9 years to provide one-bedroom apartments, the average resident of Kazan
Minimum investment of citizen	10% of the average value of the property, existing as of the date of issuance of the bonds

The right to acquire securities should be provided only to certain categories of citizens registered on the territory of the respective municipality. Among the categories of citizens highlight:

- poor citizens, recognized as such on the basis of the decision of local authorities;
- young families, age of the spouses does not exceed 35 years;
- large families, the age of the spouses does not exceed 45 years of age who wish to improve their living conditions.

In our view, there are various editions of the municipal bond trust, depending on the size of the acquired property or category of investors. For example, the target municipal bonds for the poor, targeted municipal bonds for young families, targeted municipal bonds for the acquisition of real estate from 35 to 45 sqm (or from 45 to 60 sq. m.), etc.

#### 4. Conclusion

Thus, the study of the characteristics of municipal loans of Moscow and Kazan have shown that they have in common:

- issue of securities is not targeted and is aimed at the replenishment of the local budget the necessary financial resources;
- both emitters are active participants in the Russian securities market;
- securities analysed issuers included in the calculation of the index of municipal bonds of the Moscow exchange.

Overall, we concluded that the current borrowing help to solve some financial problems of the territory.

In the article we proposed to issue bonds to solve specific social problems, in particular, to solve the housing problem of the citizens.

We believe that further research on this topic should be directed to other measures for improving the market for municipal bonds, including those associated with the activation of the private-municipal partnerships, the development of municipal and regional securities markets.

#### References

1. The Internet-project of the Information Agency Finmarket - RusBonds. [Online]. Available: <http://www.rusbonds.ru>. [Accessed: May 7, 2013].
2. The Website of the Government of Moscow, «Information about the budget». [Online]. Available: [http://budget.mos.ru/budget\\_moscow](http://budget.mos.ru/budget_moscow). [Accessed: May 7, 2013].
3. The Official portal of the Kazan city administration, «Information on the budget of the city». [Online]. Available: <http://www.kzn.ru/news/37388-deputaty-kazgordumy-prinyali-byudzhnet-goroda-na-2013-2015-gody>. [Accessed: May 7, 2013].
4. Moscow stock exchange. [Online]. Available: <http://www.micex.ru>. [Accessed: May 7, 2013].

5. Ivanov M.E. Activation of long-term investments for the construction and modernization of objects of infrastructure of the region by means of infrastructure bonds / *Journal «Financial research: problems and solutions»*, no. 83, no. 41, p.27, 2011 [Accessed: April 29, 2013].
6. The Territorial body of the Federal service of state statistics for the Republic of Tatarstan, «On the average monthly wages in January 2013». [Online]. Available: [http://www.tatstat.ru/digital/region11/Oper/zp\\_01\\_13.pdf](http://www.tatstat.ru/digital/region11/Oper/zp_01_13.pdf). [Accessed: April 30, 2013].
7. Information Agency «REGNUM», «On subsistence minimum in the Republic of Tatarstan». [Online]. Available: <http://www.regnum.ru/news/economy/1622916.html>. [Accessed: April 30, 2013].
8. Real estate Portal of Kazan, «the Prices of real estate in Kazan». [Online]. Available: <http://www.reportal.ru/prices.php>. [Accessed: May 7, 2013].
9. The OJSC «AHML the Republic of Tatarstan», «Mortgage program». [Online]. Available: <http://www.aigkrt.ru>. [Accessed: May 7, 2013].
10. Ramazanov A.V. Peculiarities of the investment operations of banks / *Journal «Actual problems of economy and the right»*, no. 4, p.176, 2012 [Accessed: April 29, 2013].
11. Garifova L.F., Kundakchyan R.M. Pratchenko O.V. Integrated assessment of the impact of socio-ecological-economic factors on the quality of life of the population of the region / *Mediterranean Journal of Social Sciences*, vol 5, June 2014, p.117-121.