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Economically Reasonable Interest Rate on Debt Obligation sin the Course of Economic Activity

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ABSTRACT

This paper is devoted to the issues of determining the upper and lower limits of an economically reasonable interest rate on debt obligations. The **purpose** of the study is to determine the boundaries of an economically reasonable interest rate on debt obligations, taking into account the main conditions of the loan relations: security, urgency, frequency of payments, availability (absence) measures of state support, etc. In the course of the study, such **methods** as content analysis of sources, regulatory regulation, and market analysis were used. The study is based on the analysis of the norms of the relationship between economic entities, taking into account the conditions for implementation of state support in socially significant areas of economic relations. In order to study the pay ability of debt obligations, the author analyzed the rules of tax legislation. It examined legal acts which revealed the facts of the use of terms of relationships other than those applied in the open market. Identified reasons for the existence of conditions of credit and borrowing relations, other than economically reasonable: interaction of affiliates, bonded terms of the transaction. The author discloses the concept of an "economically reasonable interest rate on debt obligations", which arose as a result of the inadmissibility (taking into account the rules of regulatory legal acts and established judicial practice) of the use of the term "market value" in relation to loan relations. The **results** demonstrated that the values of interest rates on debt obligations have an economically reasonable linkage (through the specified multiples of the key rate values). From the point of view of the interest rate on loan obligations, debt obligations are divided into corresponding magnified groups (debt obligations between affiliates; preferential debt liabilities; debts taking into account the degree of risk of the borrower and the security of borrowing resources). The author makes a **conclusion** about the revealed fundamental patterns in relation to economically reasonable interest rates on debt obligations, taking into account contractual terms between economic entities.

Keywords: debt obligations; credit and loan relations; key rate; refinancing rate; interest rate; market relations; appraisal activity; forensic examination; bankruptcy; tax control; affiliated entities

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INTRODUCTION

Many business entities use credit sources of financing for their activities: loans from credit institutions (banks and NCOs); loans from microfinance organizations; loans from non-specialized entities (legal entities or individual entrepreneurs who do not specialize in lending; loans from participants (shareholders) or other affiliates). There is a huge variety of credit and borrowing relations: in form, subjects of the transaction, security, payment, etc. [1].

Credit and borrowing relations between business entities can be of a market nature, but there are situations when the terms of borrowed relations are more favorable than those in the open market (such conditions may be between affiliates) [2]. There are also situations in which the conditions for the provision of credit resources are liable for the borrower ("a transaction on extremely unfavorable terms, which the person was forced to make due to difficult circumstances than the other party took advantage of (bondage transaction)"), determined by such paragraph 3 of Art. 179 Civil Code of the Russian Federation [3].

The rate on credit and borrowing relations has a significant impact on the development of the economy in the world as a whole and in individual countries; lending conditions affect the investment activity of enterprises, investment mechanisms in capital investments and investments in securities [4, 5]. It should be noted that the formation of interest rates is influenced by various factors, for example, the global financial and economic crisis [6, 7], the COVID-19 pandemic [8]. In Russia, the size of interest rates was also influenced by sanctions against Russia by many economically developed countries of the world [9]. Inflation also plays an important role in the formation of interest rates, which in Russia can have different meanings from year to year. The high interest rate on credit and borrowing relations is one of the factors of stagnation of the country's economy [10–12]. It should be noted that in economically developed countries,

where inflation is significantly lower than in Russia, base rates on credit relations are more stable [13]. Over the past one and a half to two years (since the beginning of 2022, which correlates with the SMO in Russia) and in economically developed countries, the LIBOR rate has increased, and with it the interest rates on credit and borrowing relations. But even taking into account increased inflation in economically developed countries over the past one and a half to two years, the interest rate on reliable loans, as a rule, does not exceed 5–6% per year. Of course, the interest rate on credit and debt relations due to its importance for macroeconomic processes in the country is subject to control and regulation at the state level [5, 14, 15].

Through the regulation of credit and borrowing relations, the state influences economic processes, seeking to improve the financial situation of economic entities and the population of the country [16]. That is why there is a need for an in-depth study of the conditions of interaction within the framework of credit and borrowing relations.

The study was carried out on the basis of an analysis of the norms of relations between economic entities, taking into account the conditions for the implementation of state support in socially significant spheres of the economy. In order to study the payment of debt obligations, the author also analysed the rules of tax legislation. Judicial acts are considered, which reveal the facts of the use of relationship conditions other than their use in the open market. The article analyses the reasons for the existence of terms of credit and borrowing relations other than economically justified ones: interaction of affiliated persons, bonded terms of the transaction.

The rates on credit and borrowing relations, which are offered to potential borrowers for economic activities by specialized credit and borrowing organizations (banks, entrepreneurship support funds, etc.) have also been analyzed. The author revealed that the trends in interest rates on credit and borrowed

funds are correlated with the limits of the rates defined in this study. At the same time, when the key rate changes in the appropriate proportion, the rates on credit and borrowing relations also change.

The purpose of the study is to determine the upper and lower limits of the economically justified interest rate on debt obligations, taking into account the main conditions of credit and borrowing relations: security, urgency, frequency of payments, availability (absence) of state support measures, etc.

To achieve this goal, the authors solve the following **tasks** in the study:

- to determine the main criteria and conditions of credit and borrowing relations affecting the formation of the interest rate on credit and borrowing relations;
- to analyze the reasons for the existence of conditions of credit and borrowing relations, different from economically justified ones: interactions of affiliated persons, edged terms of the transaction;
- to identify the main boundaries of interest rates, taking into account the contractual terms of debt obligations between economic entities.

RESEARCH PART

Analysis of the compliance of the conditions for obtaining debt obligations with the conditions of open market relations may be relevant in the following cases.

1. When carrying out tax control or procedures to prepare an economic entity for a tax audit (by an auditor, an internal or independent auditor, etc.). The procedure for calculating interest on debt obligations (when calculating the income tax base) is defined in Art. 269 Tax Code of the Russian Federation. Similar principles of tax control are also implemented in respect of debt obligations for entities applying the Simplified Taxation System (Chapter 26.2 of the Tax Code of the Russian Federation). At the same time, tax legislation pays attention to tax control in the interaction of interdependent (affiliated) persons (section V.1 of the Tax Code of the

Russian Federation). At the same time, the norms of the Russian current legislation provide for the possibility of providing interest-free borrowed funds. However, the tax authorities may consider an interest-free loan as a potential (in terms of taxation) income for the lender. The lender's income under the interest-free loan agreement can be determined in the amount of interest that would have been received on comparable terms at an economically reasonable rate (see the letter of the Ministry of Finance of Russia from 27.05.2016 No. 03-01-18/30778).

2. When analyzing transactions during the bankruptcy procedure. The debt obligations of the bankrupt debtor (in case of non-compliance with their market conditions) may be reclassified by the court into other (not credit and borrowed) relations. The issuance of a participant's loan to an established (dependent) company does not indicate corporate relations, but taking into account the real circumstances of the case, the court has the right to reclassify the loan relations into relations regarding the increase in the authorized capital [recapitalization of the subsidiary (dependent) company]. This possibility is due to the current legislation of paragraph 2 of Art. 170 of the Civil Code of the Russian Federation or according to the rules on circumvention of the law [paragraph 1 of Art. 10 of the Civil Code of the Russian Federation, para. 8 of Art. 2 of the Federal Law of 26.10.2002 No.127 "On Insolvency (Bankruptcy)"]. The relevant legal position is specified in the ruling of the Supreme Court of the Russian Federation from 06.07.2017 No. 308-ES 17-1556.

3. If signs of deliberate bankruptcy are revealed. The use of borrowed funds with an increased interest rate can be used to withdraw assets through affiliates or "one-day" firms.

4. When bondered transactions are invalidated in court. According to Art. 179 of the Civil Code of the Russian Federation provides for challenging transactions if the borrower has received debt obligations on extremely unfavorable terms.

5. When implementing financial and analytical procedures necessary to make various management decisions related to business reorganization, obtaining additional credit funds or property in leasing, when selling a business, etc.

6. When exercising control functions by the state, including for compliance with antitrust legislation, determining the relevance and necessity of implementing state support measures for socially important sectors of the economy.

7. In the course of the activities of internal auditors, audit commissions, independent auditors carrying out appropriate audits of economic activities of organizations.

The importance of analyzing the compliance of the terms of credit and borrowing relations with the market is very high. Based on the scientific turnover, the established practice of business turnover and the norms of the current legislation, the terminology “market interest rate on credit and loan relations” is not provided. It should be noted that the scientific literature [9], the established judicial practice (see, for example: Resolution of the Praesidium of the Supreme Arbitration Court of the Russian Federation from 03.08.2004 No. 3009/04, Resolutions of the Federal Antimonopoly Service of the North-Western District from 14.12.2006 No. A66–6512/2006 and the Far Eastern District from 24.01.2007, 17.01.2007 No. F03–A73/06–2/5259) and explanations of the authorities (see, for example: letters of the Ministry of Finance of Russia from 09.08.2005 No. 03–03–04/2/44, from 14.03.2007 No. 03–02–07/2–44, from 12.04.2007 No. 03–02–07/1–171) the concept of “market conditions” regarding the interest rate on credit and borrowed relations does not apply. This is due to a number of reasons.

The bet itself is one of the elements (important, but not the only one) in such a relationship. Interest on debt obligations is the borrower’s payment to the lender for the use of funds or other things for a certain period of time.

The interest rate on debt obligations is set taking into account the following conditions:

- the availability of protective measures for the repayment of credit and borrowed funds, including through collateral;
- the level of financial stability of the borrower, including the high or low probability of the borrower’s bankruptcy;
- the amount (size) of the loan (credit, loan), taking into account the scale effect;
- the term of provision of credit and borrowed funds;
- the frequency of interest accrual and cancellation (monthly, quarterly, once a year, at the end of the term, etc.);
- the frequency of repayment of the body of the provided credit and borrowed funds;
- the ability to control the intended use of borrowed funds, monitor the financial condition of the borrower before repayment of the debt, etc.;
- the availability of targeted state (regional, local) targeted programs to support socially important areas of activity through the provision of borrowed resources on preferential terms (for example: targeted programs to support agriculture, small businesses, export-oriented industries, IT entities, etc.)
- the amount of sanctions for improper fulfillment of obligations under the contract;
- other conditions.

The analysis of various conditions and factors in the formation of credit and borrowing relations has led to the creation of various tools for determining interest rates on credit and borrowing relations [17–19]. When developing and implementing tools for setting the interest rate on credit and borrowing relations, specialists take into account the basic criteria and conditions for the provision of debt obligations, trying to take into account all possible risks when determining the rate. For the unification and uniformity of interest rate formation, specialized credit and borrowing organizations develop internal documents regulating the procedure for setting interest rates [20].

The inadmissibility of the use of the term “market conditions” in relation to the interest rate on credit and borrowing relations has led to the expediency of introducing the concept of “economically justified interest rate on credit and borrowing relations”, which can be perceived as a kind of economic analogue of the market value of the interest rate on credit and borrowed relations.

Economically reasonable interest rate on credit and borrowing relations is the most likely interest rate at which cash (or other property that can be provided on borrowed principles) can be provided taking into account the main essential conditions [(Availability (absence) of interim measures for the return of credit and borrowed funds, the level of financial stability of the borrower, the amount of the loan (credit, loan), the term of provision of credit and borrowed funds, the frequency of accrual and repayment of interest, the frequency of the repayment of the body of the provided credit and borrowed funds itself, the amount of sanctions for improper performance of contractual relations, the possibility (impossibility) of controlling the targeted use of credit and borrowed funds, the possibility (impossibility) of monitoring the financial condition of the borrower before repayment of the debt and other conditions] on the principles of urgency, payment, return on the open market in a competitive environment, when the parties to the transaction act reasonably, with all the necessary information, and the terms of the transaction do not reflect any extraordinary circumstances, i.e. when:

- one of the parties to the transaction is not obliged to provide credit and borrowed funds, and the other party is not obliged to accept credit and borrowed funds;
- the parties to the transaction are well aware of the subject of the transaction and act in their own interests;
- information on the terms of the transaction is presented on the open market;
- the interest rate on credit and loan relations is a reasonable reward for the use of funds (or other property);

- there was no coercion to make a transaction against the parties to the transaction from any party;

- payment at the interest rate on credit and borrowing relations is expressed in cash [2].

It should be noted that in some cases, the parties on debt obligations may be able to carry out a transaction on terms that are impossible for other entities, for example: borrowed relations in a credit cooperative (deals with shareholders of the cooperative), borrowed relations of certain categories of economic entities under certain state target programs to support various categories of economic entities [deals on preferential terms or with compensation (subsidy) from budget funds of interest (in whole or in part) on borrowed funds].

But let's go back to the terms of credit and loan relations for entities operating in the open market.

The borrower is looking for borrowing conditions (receiving a loan) with a minimum (if possible, other things being equal) rate, and the lender is looking for borrowing conditions (loan) with the maximum (if possible, other things being equal) rate.

In fact, there is another economic restriction for the lender: it is impractical and ineffective to provide own funds in a loan at a rate below the inflation rate (consumer price index), as there is (in case of inflation) impairment of money (asset): after the return of the loan with interest, the amount of which is lower than the inflation rate, the lender will not only not receive additional income, but will also have an asset less (in terms of its purchasing power) than before the loan.

Accordingly, the loan rate below the inflation rate in the country cannot be economically feasible. An exception may be in the following cases:

- the entity providing credit and borrowed funds has a source of external financing (borrowed funds), the payment (expenditure) of which is lower than the rate of funds issued to the borrower;

- the entity providing credit and borrowed funds participates in state target programs aimed at supporting certain categories of economic entities (agriculture, small or medium-sized businesses, etc.) and receives targeted public funds for the issuance of credit and borrowed funds on preferential terms (or receives state subsidies for compensation for preferential lending);

- the entity providing credit and borrowed funds is a non-profit organization and has the right to provide borrowed funds (for example: credit cooperatives, entrepreneurship support funds, etc.).

Let's study the definition of reasonable boundaries (corridor) of the economically justified interest rate on debt relations.

The refinancing rate (lending rate) of the Central Bank of the Russian Federation can be considered as a basis in credit and borrowing relations. This conclusion can be reached by analyzing Art. 317.1 and 809 of the Civil Code of the Russian Federation.

According to paragraph 1 of Art. 317.1 of the Civil Code of the Russian Federation "Interest on the monetary obligation" "in cases where the law or contract provides that interest is accrued on the amount of the monetary obligation for the period of use of funds, the amount of interest is determined by the key rate of the Bank of Russia (legal interest) in force in the relevant periods, unless another amount of interest is established by law or contract".

A similar norm in its essence is specified in paragraph 1 of Art. 809 of the Civil Code of the Russian Federation "unless otherwise provided by law or loan agreement, the lender has the right to receive interest from the borrower for the use of the loan in the amount and in the manner specified in the contract. If there is no condition in the contract on the amount of interest for the use of the loan, their amount is determined by the key rate of the Bank of Russia in force during the relevant periods".

Let's consider the legal and economic essence of the Bank of Russia interest rate.

Refinancing interest rate (counting rate) — the interest rate when the Central Bank provides loans to commercial banks. It is also used for taxation and calculation of penalties and fines. It was introduced on 1 January 1992.

The key rate is the interest rate on the main operations of the Bank of Russia to regulate the liquidity of the banking sector. It is the main indicator of monetary policy. It was introduced by the Bank of Russia on 13 September 2013.

"The key rate of the Bank of Russia affects market interest rates, on which the tendency of economic entities to consume or save depends" [see "The main directions of the unified state monetary policy for 2022 and the period 2023 and 2024" (approved by Bank of Russia)].

From 1 January 2016, the Bank of Russia does not set an independent value of the refinancing rate of the Bank of Russia.

In practice, the "refinancing rate (counting rate)" and "key rate" are synonymous terms. This study does not make a fundamental distinction between these concepts.

Next, we will consider the principle of forming a rate on credit and borrowing relations. The Central Bank (Bank of Russia) credits commercial banks at a key rate. Commercial banks, having received the appropriate funds, increase the rate on a certain margin, which should cover the bank's expenses (including bank management, ensuring current operations, etc.) and bring profit.

The entity providing credit and borrowed funds may have cheaper sources of borrowed funds than the key rate, but from the point of view of the theory, the interest rate on borrowed funds is formed taking into account "basically".

Naturally, the rate on the provided credit and borrowed funds should cover the risk of non-repayment of the provided credit and borrowed resources.

Taking into account the above for more risky entities, in the absence (or low level) of collateral for the return of credit and borrowed resources, a higher rate is established.

It should be noted that from a legal point of view, the loan [issued by a credit institution (bank or non-bank credit organization)] and the loan (issued by an economic entity in the course of economic activity) will have different legal forms, but from an economic point of view, debt obligations (for the recipient of credit and borrowed funds) will have a similar (from an economic point of view) basis: the principles of payment, urgency and repayment.

To analyze the rates on debt obligations, we will analyze the regulatory framework, as well as statistics on interest rates in the credit market.

It should be noted that in certain regulatory and legal documents regulating the relevant spheres of economic activity, which are of high socio-economic importance for society, there are certain restrictions on the size of interest rates, for which it is permissible to attract credit and borrowed resources.

Let's look at the examples.

According to p.p.e.p. 3 Resolutions of the Government of the Russian Federation from 29.12.2011 No. 1178 "On pricing in the field of regulated prices (tariffs) in the electric power industry" regarding the maximum interest rate on debt obligations, it is stated that "the amount of interest included in uncontrolled expenses is accepted equal to the rate under the loan agreement or loan agreement, but not higher than the key rate of the Central Bank of the Russian Federation, increased by 4% points", i.e. "the amount of interest included in the uncontrolled expenses is accepted" in the amount of not more than 1.5 key rate.

Here and further, the author recalculated the absolute percentage points specified in the regulatory document into multiple sizes (shares, rounded to one decimal place after the decimal point) of the key rates (refinancing rates).

The Resolution of the Government of the Russian Federation from 22.10.2012 No. 1075 "On Pricing in the Field of Heat Supply" borrowed funds "at an interest rate not exceeding 5% per year" as a preferential rate

on debt obligations (note: 0.6 key rate). At the same time, according to the resolution of the Government of the Russian Federation from 25.08.2017 No. 997 "On the implementation of financial support measures at the expense of the state corporation — the Fund for Assistance to the Reform of Housing and Communal Services and Amendments to Certain Acts of the Government of the Russian Federation", the maximum value of interest on borrowed funds is indicated the amount of "actually incurred expenses not exceeding the amount equal to the refinancing rate of the Central Bank of the Russian Federation, increased by 4 percentage points", i.e. not more than 1.5 key rate.

The Decree of the Government of the Russian Federation from 13.05.2013 No. 406 "On state regulation of tariffs in the field of water supply and sanitation" as a preferential rate on debt obligations, borrowed funds are specified "at an interest rate not exceeding 5% per year" (note: 0.5 key rate), and the limit value of the interest rate "in the amount calculated on the basis of the interest rate, equal to the refinancing rate of the Central Bank of the Russian Federation, effective on the date of attraction of such funds (conclusion of the loan agreement, loan agreement), increased by 1.5 times, but not less than 4 percentage points" (note of the car: 1.5 key rate).

The Decree of the Government of the Russian Federation from 30.05.2016 No. 484 "On pricing in the field of solid municipal waste management" states that "expenses related to the maintenance of borrowed funds are taken into account in the amount calculated on the basis of the interest rate equal to the key rate of the Central Bank of the Russian Federation in force on the date of attraction of such funds (conclusion of the loan agreement, loan agreement), increased by 4 percentage points", i.e. not more than 1.4 key rate.

According to the order of the Ministry of Economic Development of Russia from 26.03.2021 No. 142 "On approval of requirements for the implementation of measures carried out by the subjects of the

Russian Federation, whose budgets are provided with subsidies for state support of small and medium-sized businesses, as well as individuals applying the special tax regime “Professional Income Tax” in the constituent entities of the Russian Federation aimed at achieving the goals, indicators and results of regional projects that ensure the achievement of the goals, indicators and results of federal projects included in the national project “Small and medium-sized enterprises and support of individual entrepreneurial initiative”, and requirements for organizations that form the infrastructure of support for small and medium-sized businesses” (registered with the Ministry of Justice of Russia from 20.05.2021 No. 63543)” depending on the category of borrowers to whom microloan is granted, a differentiated approach is applied to determining the interest rate for the use of microloan”:

- not more than 0.5 key rate in respect of borrowed funds provided to small and medium-sized businesses “registered and operating on the territory of a mono-profile municipality, when they implement priority projects”;
- not more than the key rate in respect of borrowed funds provided to small and medium-sized businesses in the implementation of their priority projects;
- not more than 2–2.5 key rate in respect of borrowed funds provided to small and medium-sized businesses, including unsecured borrowed funds [in the absence of collateral and/or surety (guarantee) of the credit assistance fund (guarantee fund, surety fund)].

It should be noted that in some regulatory documents regulating the limit (maximum) interest rate on credit and borrowed resources, there is a reference to the norms of tax legislation. And the restrictions provided for under the tax legislation regarding the interest rate on credit and borrowing relations will also reasonably illustrate the economically reasonable rate on credit and borrowing relations. Let’s consider the limit norms for including interest on borrowed funds under tax legislation.

This issue is devoted to Art. 269 of the Tax Cod of the Russian Federation. It refers to the inclusion of the average interest value in the expenditure, and in the absence of an average value, interest rate limits are used. It should be noted that the norms of tax legislation (on this issue) are periodically changed and had (in different periods of time) restrictions on the maximum amount of inclusion of interest on debt obligations in the amount of not more than 1.25 and 1.8 of the key rate.

Analysis of deposit rates on savings of individuals (from the point of view of debt obligations of banks) allows us to conclude that for term debt obligations, the economically justified interest rate can be considered a range from 0.5 to 1.5 of the size of the key rate (taking into account the norms of the Federal Tax Service of Russia from 15.08.2012 No. ED-4–3/13520@ “On personal income tax”). At the same time, in respect of deposits of individuals (lenders in respect of the analyzed debt obligations) for a certain amount, the state acts as a guarantor of the return of these funds through the deposit insurance system.

The validity of the findings is clearly illustrated by the change in interest rates (within the described limits) with a significant change in the size of the key rate in 2022. The jump in the size of the key rate in March 2022 from 9.5% per year to 20% [with a further reduction (from the end of 2022 to the first half of 2023, the key rate was 7.5% per year, which is proportional to the key rate before the beginning of the SMO)] led to a commensurate increase in rates on credit-borrow (and deposit) relations.

CONCLUSION

Summing up the results of the study, the author made the following conclusions about the limits of the economically justified interest rate on debt obligations:

- interest-free debt obligations are possible among affiliates;
- preferential interest rates on debt obligations in the amount of about 0.5 of the

key rate (or even lower) can be considered preferential;

- 0.5–1 key rate can be considered an economically reasonable interest rate on debt obligations in some cases;

- 1–1.5 of the key rate should be considered an economically reasonable interest rate on debt obligations;

- up to 2.5 of the key rate can be considered an economically reasonable interest rate on debt obligations in respect of medium-risk unsecured borrowed relations;

- more than 2.5 of the key rate may be an economically reasonable interest rate on debt obligations on high-risk debt relations against financially unstable entities.

The results obtained in the course of the studies regarding the values of interest rates on debt obligations have an economically

justified link (through the specified multiples of the values of the key rate) to the key interest rate, which will allow to analyze borrowed relations not only for the current date, but also for relations in the past and in the future, using the key rate effective on the corresponding date for analysis.

The use of the values of the economically justified interest rate on debt obligations given in the study will allow to adequately and economically competently assess the terms of debt obligations in the course of state control functions in the field of taxation, compliance with the norms of antimonopoly legislation and the selection of subjects for the provision of state support measures, in judicial proceedings during the consideration of bankruptcy cases or corporate disputes, as well as in the course of management decisions.

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