

SCENARIO SIMULATION OF THE ACHIEVEMENT OF NATIONAL TARGETS: A CASE STUDY OF THE RUSSIAN STOCK MARKET

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Abstract. This paper is devoted to scenarios for achieving the targets of stock market development. The President of the Russian Federation has set a national target: the Russian stock market shall reach a capitalization of 66% of the national gross domestic product (GDP) by 2030 and 75% of the GDP by 2036. As of the end of 2025, the capitalization of the Russian stock market was nearly 100 times lower than that of the United States, even though Russia's GDP at purchasing power parity was roughly one-sixth of the US GDP. An enlarged scheme is proposed to analyze the achievement of national security targets. The measures described in strategic planning documents on stock market development are examined in detail; however, they do not specify the factors necessary for the intensive development and higher efficiency of stock market participants. As shown below, the inertial development scenario is insufficient; the parameters are evaluated under which the targets of stock market development can be achieved. The factors of a multiple increase in the volume of Russia's stock market are considered. An original two-period discounted cash flow valuation model is used to study influence factors for target indicators. Due to its analytical form, this model significantly simplifies its parameter analysis as well as its application to a broad range of enterprises in the stock market. The model scenarios considered demonstrate the possibility of achieving the target market capitalization indicators by increasing initial public offerings (IPOs) and improving the operational efficiency of Russian issuers. This study is based on the input data provided by the World Bank, the Federal State Statistics Service, and the Federal Tax Service of the Russian Federation.

Keywords: modeling, forecasting, national security, large-scale systems, stock market, enterprise valuation, efficiency.

INTRODUCTION

The current development stage of the Russian economy places higher demands on the stability and efficiency of financial markets, particularly the stock market. Amid geopolitical instability, these demands become particularly acute: the stock market is a key mechanism for attracting investment, transforming savings into capital, and ensuring long-term economic growth; moreover, it is an important macroeconomic stability indicator in the face of external challenges. In this regard, it is crucial to achieve the development targets set at the highest government level.

The President of the Russian Federation has set ambitious national targets: to increase the stock market

capitalization to 66% of the gross domestic product (GDP) by 2030 and to 75% of the GDP by 2036. According to the analysis, the existing strategic planning documents primarily contain general measures for developing the stock market, without specifying the driving factors of its rapid growth or the mechanisms for improving operational efficiency. These documents are dominated by an inertial scenario, which is insufficient to achieve the above targets; see the detailed discussion below.

Planning is a core function within any development management system [1].

This paper aims to assess the conditions under which the target capitalization indicators for the Russian stock market can be achieved and to identify the key factors ensuring its multiple growth.



To implement this aim, we solve the following tasks:

- develop an enlarged scheme for analyzing the achievement of target indicators considering national security requirements;
- analyze the existing strategic documents to identify any intensive development mechanisms for the stock market;
- build and validate an analytical model to assess the influence of key factors on stock market capitalization;
- simulate scenarios for achieving the target indicators under various market development conditions;
- assess the role of increasing *initial public offerings* (IPOs) and improving the operational efficiency of Russian issuers in achieving target indicators.

This study is methodologically based on a two-period *discounted cash flow* (DCF) valuation model. Its analytical form offers two key advantages as follows. First, the model's parameters and their interrelationships can be analyzed rather simply; second, the calculations can be scaled to a significant number of enterprises listed on the stock market.

The scientific contribution of this paper consists, first, in the development and application of a model for the quantitative assessment of the conditions necessary to achieve target market capitalization indicators and, second, in the identification of driving factors for rapid stock market growth through the improved operational efficiency of issuers.

The results are of practical significance: they can be applied to revise strategic planning documents, form government support measures for the stock market, and develop corporate strategies for issuers.

1. METHODOLOGY FOR ANALYZING THE ACHIEVEMENT OF NATIONAL TARGETS: A REVIEW

The approach described below proceeds from a set of indicative planning models and methods [2], focused on analyzing strategic planning documents and the achievement of national security targets.

This study is methodologically based on a refinement of the original approach presented in the monograph [2]. The authors developed a holistic indicative planning methodology with a system of interconnected models to track the entire chain, i.e., from goal-setting to a system of indicators, then to the necessary measures and resources, and finally, to the calculation of the achievable level of target indicators under existing constraints. Below, this conceptual framework is adapted and specified for the analysis of strategic planning documents in conjunction with national secu-

rity targets, for a case study of the stock market targets. As a result, we assess the balance between the targets and indicators and, moreover, identify potential logical gaps in the “targets–tasks–measures–resources” chain.

In the context of such problems, let us emphasize the works of O.O. Smirnova, devoted to the theoretical foundations and practical aspects of strategic and indicative planning in Russia. In her monograph [3], the author laid the conceptual and institutional foundations of strategic planning as a holistic system, with its evolution, regulatory and legal support, and implementation mechanisms at various control levels. This book remains relevant as a source of a systematic view of the planning architecture during the formation of the modern legislative framework.

These ideas were further developed in a series of papers, where Smirnova addressed the indicative planning challenge directly. In [4], she analyzed the processes of adapting classical indicative approaches to Russian realities and identified the distinctive features of the national model, which combines elements of directive and indicative planning. According to the author's viewpoint, under high uncertainty, it is necessary to make planning tools flexible.

In the next publication [5], the focus shifted toward practical implementation, i.e., the key principles for building an indicative planning system, the criteria for selecting indicators, and the possibilities for integrating indicative methods into the existing public administration system. Smirnova's works are valuable for this study, as they provide a methodological framework for analyzing the consistency of targets, tasks, and indicators in strategic planning documents, as well as for assessing the potential of indicative methods as a tool for managing stock market development.

The experience of indicative planning and modeling at the regional level was described by F.F. Pashchenko et al. [6–8]. The practical implementation of indicative planning at the regional level was thoroughly studied by a research team led by Pashchenko and A.B. Levintal'. In the monograph [6], the authors outlined methodological approaches to developing indicative planning systems for the constituent entities of the Russian Federation and analyzed international experience in regional indicative planning. The issues related to the adaptation of foreign practices and particular methods for calculating target indicators were discussed in detail by researchers of the Trapeznikov Institute of Control Sciences, the Russian Academy of Sciences [7, 8].

As demonstrated by Z.K. Avdeeva and S.V. Kovriga [9], systemic inconsistency among documents is one of the most serious challenges for the current stra-

tegic planning system in Russia: declared targets are not always supported by adequate tasks and indicators, and there are no mechanisms to check their consistency. The authors proposed cognitive modeling tools to analyze and eliminate such mismatches, which will improve the coherence and feasibility of strategic documents. In this study, we develop the above approach as applied to the analysis of the factors influencing the achievement of stock market capitalization targets.

Figure 1 shows an enlarged scheme for analyzing the achievement of target values for national security indicators. Strategic planning policy documents formulate national security targets and tasks, as well as specify the national security indicator and its target dynamics. Based on factual data from previous years, an inertial forecast of indicator values can be constructed. If the inertial scenario is insufficient, one should consider a set of measures (a development model) for additional growth in development indicators. Note that an inertial forecast of the indicator as a time series may be inaccurate, as there may exist influence factors neglected by the inertial scenario.

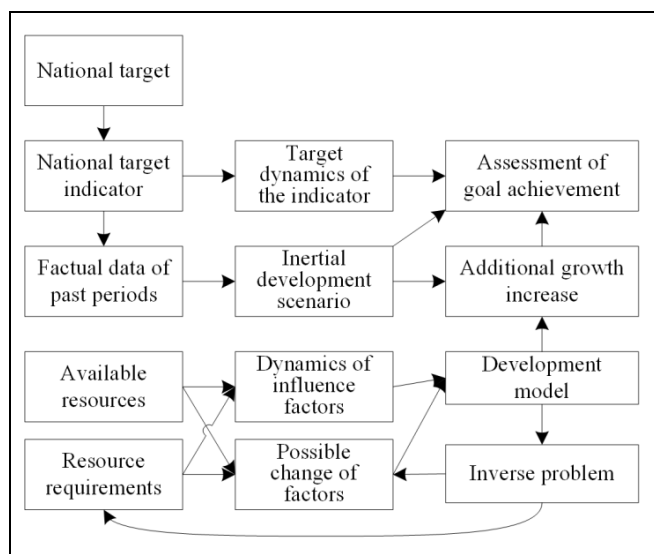


Fig. 1. The scheme for analyzing the achievement of target indicators.

In the case of resource shortage, it is reasonable to increase the operational efficiency of enterprises, optimize resource utilization, and improve influence factors.

The inverse problem (what combination of influence factors is necessary to achieve a target?) is formulated and solved to understand the attainability of the target indicator. The inverse problem has a non-unique solution, and optimization problems can be posed here. An example of structuring solutions during the formation of development scenarios was considered in [10].

2. SOME NATIONAL TARGETS OF THE RUSSIAN FEDERATION: REGULATORY DOCUMENTS

The system of national development targets was established by Decree no. 309 of the President of the Russian Federation dated May 7, 2024 [11]. Hereinafter, it will be referred to as the Decree on National Targets or simply the Decree.

Article 6 of this document specifies national security targets related to economic development, in particular, e) ensuring that stock market capitalization will grow to at least 66% of the GDP by 2030 and to 75% of the GDP by 2036, and increasing the share of long-term savings in citizens' total savings to at least 40% by 2030 and 45% by 2036.

The indicator called stock market capitalization relative to GDP (MC/GDP) is calculated according to the order [12]:

$$MC/GDP = MC / G,$$

where G is GDP at current prices; MC is the capitalization of the Russian stock market based on the market capitalization of the shares of enterprises that are residents of the Russian Federation and traded on Russian stock exchanges, as of the end of the last trading day of the reporting year.

As stipulated by [12], the source of information for calculating MC is the data from the Bank of Russia published on the official websites of PJSC Moscow Exchange (MOEX), PJSC SPB Exchange, JSC St. Petersburg Currency Exchange (SPCEX), and JSC Eastern Exchange (Vostochnaya Birzha), broken down by enterprise identification data, including the International Securities Identification Number (ISIN), by summing the market capitalizations of these enterprises in RUB equivalent at the Bank of Russia's official exchange rate. In this study, all calculations are made for MOEX since trading sessions on SPB Exchange, SPCEX, and Eastern Exchange account for a small share of the total volume.

Strategic planning documents on stock market development do not specify the driving factors of intensive growth and increased efficiency among stock market participants. In this paper, we show that the inertial development scenario is insufficient and evaluate the parameters under which the targets of stock market development can be achieved.

3. THE GROWTH MODEL OF STOCK MARKET CAPITALIZATION

The stock market capitalization MC is the total market value of all public enterprises whose shares are



traded on an exchange. It is calculated as the product of the number of an enterprise's shares and their current market price:

$$MC_t = \sum_i \sum_j N_{jit} p_{jit},$$

where N is the number of shares of a specific class; p is the stock price; the subscripts j and i are associated with the stock class (common or preferred) and the enterprise, respectively.

Table 1 presents information on countries with high (absolute) stock market capitalizations [13, 14]. As of the end of December 2025, the shares of 211 enterprises were traded on MOEX. The total capitalization of the Russian stock market reached 53.754 trillion RUB, or 640 billion USD, as of December 31, 2025. For comparison, at the end of 2024, the value of the US stock market was 62 trillion USD, which was 120 times greater than that of Russia. According to World Bank data, Russia's stock market ranked 17th in the world and was comparable to the stock markets of Thailand and Singapore, despite the vastly different sizes of the countries.

According to this table, some countries in the top 20 have a market capitalization-to-GDP ratio of less than 100%: China, Germany, Spain, Brazil, and Russia. This study may be useful for the aforementioned countries.

Table 1

Countries with high stock market capitalizations

No.	Country	Market capitalization, in billion USD		The share of GDP (2024), in %
		2023	2024	
	World	102 923	114 462	129.2
1	USA	48 979	62 186	216.3
2	China	10 936	11 756	62.7
3	Japan	6149	6311	156.7
4	India	4340	5131	131.2
5	Hong Kong	3975	4550	1118.2
6	Canada	3099	3374	150.4
7	Saudi Arabia	3015	2727	220.0
8	Germany	2178	2044	43.6
9	Switzerland	2,045	1971	210.5
10	Australia	1789	1737	98.9
11	Republic of Korea	1968	1557	83.0
12	UAE	994	1054	190.9
13	South Africa	1026	986	245.7
14	Spain	770	754	43.7
15	Brazil	991	659	30.1
16	Singapore	608	638	116.5
17	Russia	650	521	26.4
18	Thailand	520	520	98.7

Thus, a large-scale and ambitious target has been set: to join the global race for capital starting from the current low position.

Calculations based on the data [13] show that $CAGR_{World, 1975-2024} = 9.846\%$ (the average annual growth rate of the global market capitalization for 1975–2024). The growth rate of the global market capitalization is several times higher than that of the global GDP.

The dynamics of the Russian stock market are presented in Fig. 2 [15]. Since 2007, the capitalization of the Russian stock market has demonstrated almost no growth in USD terms.

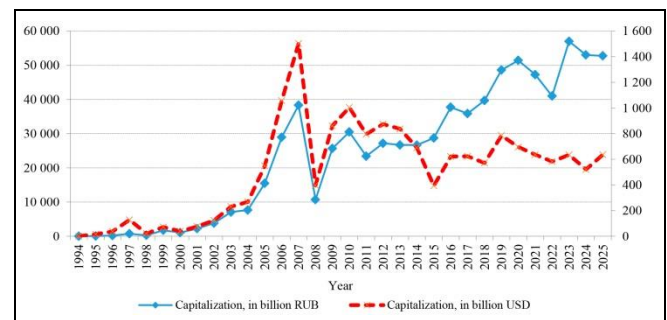


Fig. 2. The market capitalization dynamics of Russian publicly traded enterprises.

Next, Fig. 3 shows a simplified information model of stock market capitalization growth. This diagram illustrates the main driving factors of market capitalization growth. Growth will occur through the following mechanisms [16]:

- in the inertial scenario, through an increase in the revenue of issuers (evaluated via multiples) and their accumulated retained earnings (evaluated using net assets);
- due to a potential increase in the operational efficiency of issuers through:
 - higher revenue,
 - lower costs,
 - lower capital intensity,
 - lower discount rate caused by risks and inflation;
- through additional capital inflows directed toward the IPOs of new issuers and the purchase of existing shares.

The stock market development landmark discussed above—market capitalization relative to GDP—is a macroeconomic indicator that aggregates the results of numerous economic agents. However, there are particular enterprises behind every aggregated indicator, and their combined market value forms the total capitalization of the stock market. In essence, the national targets are achieved as a consequence of the successful

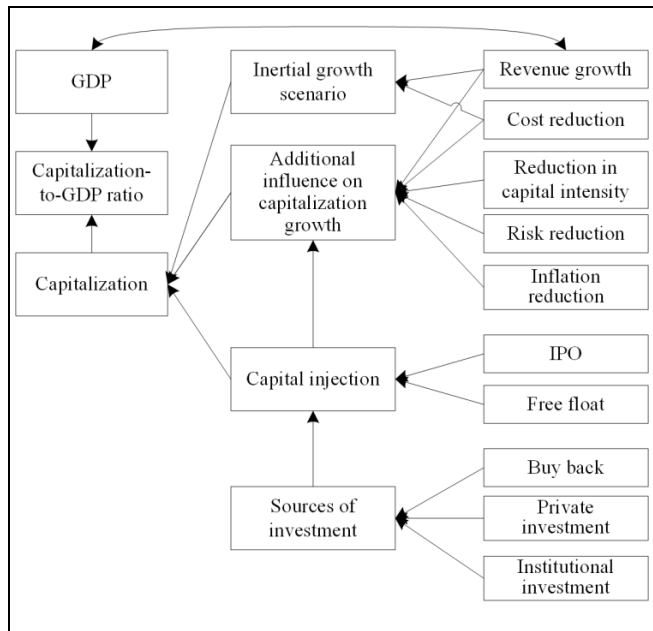


Fig. 3. The informational model of stock market growth.

development of individual issuers: growth in their revenue, profitability, and investment attractiveness. In this regard, it is necessary to shift from macroanalysis to the micro level, i.e., investigate the factors determining the value of each particular enterprise as a primary element of the stock market.

The seminal book [17] is a comprehensive guide to the theory and practice of business valuation and value-oriented management. This book has become a classical reference work combining a solid methodological foundation—including analysis methods for discounted cash flows, economic profit, and multiples—with a wealth of empirical data gathered while consulting for leading global corporations. The authors focused on pressing issues in the modern economy: the specifics of valuing technology enterprises, the significance of intangible assets, analytical methods under high uncertainty, and the integration of a value-based approach into strategic planning processes.

The technical aspects of the methods (DCF, economic profit, and option pricing) and, moreover, conceptual foundations were considered in detail in [18, 19]. Why is value created or destroyed? How can it be measured? Extensive studies were conducted to systematically describe the main approaches to corporate valuation and their connection to the concept of shareholder value creation.

The studies [16, 20] were based on three approaches to corporate valuation: the net asset method, the multiples method, and the income approach (DCF). The authors compared the results of each approach with the actual market value of the enterprises to identify errors and limitations of the methods as well as to assess their sensitivity to model parameter variations.

In Russia's current economic conditions, several conventional methods for calculating the discount rate require appropriate adaptation. The approaches involving foreign indicators (US Treasury bond yields and statistics from developed markets) no longer yield relevant results. While the theory of valuation has been traditionally focused on direct methodologies for determining an enterprise's value, the issue of correctly calculating the discount rate also requires separate analysis. The original methodology proposed in the paper [21] involves ruble-denominated risk-free assets, specifically Russian federal government bonds, and data from the Russian stock market. Within this approach, a deterministic risk assessment mechanism was developed to avoid the overestimation of the capital value, characteristic of the use of foreign information sources. The method is particularly important for mature enterprises, as it provides a more accurate value of such enterprises considering national market specifics.

The choice of an appropriate method for calculating the discount rate can be a manipulation tool when valuing an enterprise by the DCF method. The influence of this parameter on the final valuation is appreciably higher during periods of high market volatility and uncertainty. According to the study [22], even a slight change in the discount rate can lead to significant fluctuations in the calculated value of an enterprise, confirming the key role of this parameter in DCF models. Hence, there is a risk of distorting valuation results due to the influence of this hidden factor, which shall be taken into account when interpreting the outcomes.

The DCF method is a widespread tool for valuing mature enterprises. However, its application requires a balanced approach due to the model's high sensitivity to variations of key input parameters. Even minor adjustments to the discount rate or forecasted growth rates can significantly affect the final valuation. On the one hand, this feature explains the analytical value of the method; on the other, it creates a potential risk of manipulating results by varying initial assumptions, such as the risk-free rate or the risk premium [23].

As demonstrated in [24, 25], an unjustified overestimation of forecasted growth rates leads to an overvaluation of an enterprise—a quite common situation in the practice of financial advisors. In this paper, we restrict the sample under analysis to mature enterprises, which will enhance the validity of the assumptions made. According to E. Kramna's observations [24], over 60% of the studies analyzed have no clear justification for the choice of growth rates. This indicates a high risk of manipulation of the final valuation and underlines the need for a rigorous justification of all initial parameters, as well as the use of several valuation methods, to make the final results more reliable.



4. AN ESTIMATION MODEL FOR RUSSIA'S GDP

The target indicator dynamics significantly depend on GDP [26]. Consider the GDP forecast for Russia through 2036. The GDP dynamics are governed by the equation

$$G_t = G_{t-1}(1 + f_t)(1 + p_t) = G_{t-1}(1 + g_t),$$

or

$$G_T = G_0 \prod_{t=1}^H (1 + f_t)(1 + p_t) = G_0 \prod_{t=1}^H (1 + g_t),$$

where f is the physical volume index (the real GDP growth rate); p is the deflator index (the price index); g is the GDP growth at current prices; t denotes the time variable; finally, H is the analysis horizon.

We estimate the GDP using the model with the key macroeconomic parameters of the medium-term forecast for the socioeconomic development of the Russian Federation through 2028, extrapolated to 2030 and 2036: the GDP growth rate f_t varies between 2.5% and 2.8%, whereas the price deflator index p_t varies between 105.5 and 106.8; for details, see [27].

The model-based estimate of Russia's GDP is $G_{2030} = 323$ trillion RUB in 2030 and $G_{2036} = 474$ trillion RUB in 2036 (Table 2 and Fig. 4).

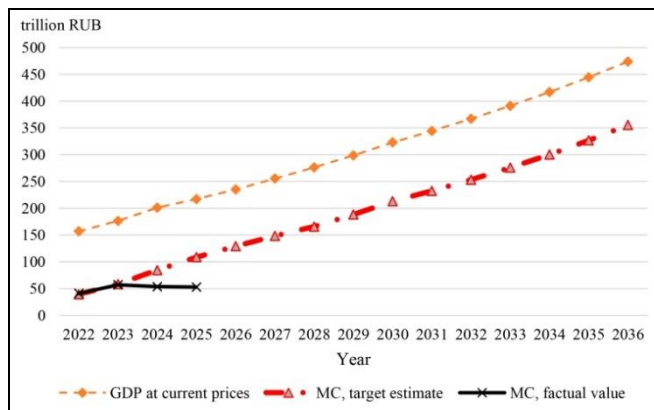


Fig. 4. The dynamics of target indicators for the stock market.

Thus, the following problem can be formulated.

Problem: it is required to increase the stock market capitalization MC from $MC_{2025}^{\text{fact}} = 53$ trillion RUB

in 2025 to $MC_{2030}^{\text{tar}} = 213$ trillion RUB in 2030 and $MC_{2036}^{\text{tar}} = 355$ trillion RUB in 2036.

According to Fig. 4, the target forecast (estimate) for the stock market capitalization appears to be highly optimistic. The factual market capitalization dynamics for 2024–2025 significantly lag behind the growth of the GDP G .

5. THE TWO-PERIOD ANALYTICAL VALUATION MODEL: DRIVING FACTORS OF MARKET CAPITALIZATION GROWTH

The following model for the market capitalization of an individual enterprise based on discounted cash flows was described in [16, 17, 20]:

$$MC_C = EV - D = \sum_{t=1}^{\infty} \frac{FCF_t}{(1+r)^t} - D = EV_1 + EV_2 - D, \quad (1)$$

where MC_C is the market capitalization of a company (the value of equity); EV is the enterprise value; EV_1 and EV_2 are the enterprise values in the forecast and post-forecast periods, respectively; FCF_t is the free cash flow in period t ; D is debt; r is the discount rate; t denotes the time variable.

A standard approach is to divide the analysis horizon into forecast and post-forecast periods. Valuation in the forecast period is performed by constructing an explicit free cash flow forecast:

$$EV_1 = \sum_{t=1}^T \frac{FCF_t}{(1+r)^t} = NPV,$$

where NPV is *net present value* (a key indicator for assessing the efficiency of investment projects); T is the forecast period length.

Valuation in the post-forecast period is performed using the Gordon formula

$$EV_2 = \sum_{t=T+1}^{\infty} \frac{FCF_t}{(1+r)^t} = \frac{NOPLAT_{T+1}(1 - \frac{g}{ROIC})}{(r - g)(1+r)^T},$$

where $NOPLAT$ is *net operating profit less adjusted tax*; $ROIC$ is *return on invested capital*; and g is the growth rate in the post-forecast period.

Table 2

Estimated values of target indicators for the stock market, trillion RUB

Indicator	Year									
	2022 (factual)	2023 (factual)	2024	2025	2026	2027	2028	2029	2030	2036
GDP at current prices	157	176	201	217	235	255	276	299	323	474
Target estimate MC	39	58	84	109	129	148	166	188	213	355
Factual value of MC	41	57	54	53	—	—	—	—	—	—

Under constant values of the revenue growth rate s , capital intensity a , and profitability m , for mature enterprises, the valuation model can be analytically written [16, 28] as

$$MC_C = S_0(1+s) \times \left[\left(\frac{1+s}{1+r} \right)^N \frac{(s-g)(m-ra)}{(r-g)(s-r)} - \frac{m-sa}{s-r} \right] - D,$$

where S_0 denotes revenue in the initial period.

According to the calculations for the Russian [28–30] and US [31] stock markets, the model matches factual market capitalization data with acceptable accuracy.

The analytical valuation model allows identifying the key factors influencing the fundamental value of an enterprise. First and foremost, these are revenue growth, profitability, capital intensity, and the discount rate.

This valuation model can be analytically investigated to find the ranges of model parameters (conditions) ensuring the maximum value (market capitalization). Some of the conditions seem obvious:

- increasing the profitability m ,
- decreasing the capital intensity a , and
- reducing risks and the discount rate r .

In the case $m > ar$, the growth of the revenue s for increasing value is not always reasonable and may cause *value destruction*.

A valuation model with parameter changes was presented in [32]. Let us introduce the unit cost indicator $c = 1 - m$. When unit costs and capital intensity vary by Δc and Δa per year, respectively, with a constant revenue growth rate s , the value EV_1 is calculated as

$$EV_1 = \sum_{t=1}^T \left(\frac{S_0(1+s)^t(1-c_0(1+\Delta c)^t)}{(1+r)^t} - \frac{a_0(1+\Delta a)^t s / (1+s)}{(1+r)^t} \right),$$

where c_0 and a_0 are the unit costs and capital intensity in the initial period, respectively.

After straightforward transformations,

$$EV_1 = S_0 \left\{ \frac{\left(\frac{1+s}{1+r} \right)^T - 1}{1 - \left(\frac{1+s}{1+r} \right)^{-1}} - c_0 \frac{\left(\frac{(1+s)(1+\Delta c)}{1+r} \right)^T - 1}{1 - \left(\frac{(1+s)(1+\Delta c)}{1+r} \right)^{-1}} - a_0 s / (1+s) \frac{\left(\frac{(1+s)(1+\Delta a)}{1+r} \right)^T - 1}{1 - \left(\frac{(1+s)(1+\Delta a)}{1+r} \right)^{-1}} \right\}.$$

To estimate the free cash flow FCF_{N+1} in the first post-forecast period, we assume the revenue growth rate g during the first interval of the post-forecast period. Then, the enterprise value in the post-forecast period can be written as

$$EV_2 = \sum_{j=1}^{\infty} \frac{FCF_T(1+g)^j}{(1+r)^T(1+r)^j} = S_0 \frac{(1+s)^T}{(1+r)^T} \frac{(1-c_0(1+\Delta c)^T)(1+g) - a_0(1+\Delta a)^T g}{r-g}.$$

(This series is convergent if $r > g$.)

For brevity, let $s_1 = 1 + s$, $r_1 = 1 + r$, $\Delta c_1 = 1 + \Delta c$, and $\Delta a_1 = 1 + \Delta a$. Then

$$EV_1 = S_0 \left\{ \frac{\left(\frac{s_1}{r_1} \right)^T - 1}{1 - \left(\frac{s_1}{r_1} \right)^{-1}} - c_0 \frac{\left(\frac{s_1 \Delta c_1}{r_1} \right)^T - 1}{1 - \left(\frac{s_1 \Delta c_1}{r_1} \right)^{-1}} - a_0 s / (1+s) \frac{\left(\frac{s_1 \Delta a_1}{r_1} \right)^T - 1}{1 - \left(\frac{s_1 \Delta a_1}{r_1} \right)^{-1}} \right\}, \quad (2)$$

$$EV_2 = S_0 \left(\frac{s_1}{r_1} \right)^T \frac{(1-c_0 \Delta c_1^T)(1+g) - a_0 \Delta a_1^T g}{r-g}. \quad (3)$$

Below, we consider scenarios for estimating market capitalization as the sum of enterprise market capitalizations based on formulas (1)–(3):

$$MC = \sum_J MC_c(S_0, s, c, \Delta c, a, \Delta a, r, T, g), \quad (4)$$

where J is the set of enterprises.

Table 3 presents a sensitivity analysis of the total market capitalization estimate MC when changing the parameter values by 1% and extending the forecast period by 1 year. Sensitivity to cost variations is very high: a 1% change in costs leads to a 50% change in market capitalization. In essence, this corresponds to a significant increase in profit with a slight percentage reduction in costs. Sensitivity to discount rate reductions is also very high. The calculations were performed for a sample of enterprises listed on MOEX (hereinafter referred to as the “sample”) based on the data as of the end of 2024.

Figure 5 and Table 4 show the parametric calculation results for the total capitalization estimate (4) when varying the costs Δc and capital intensity Δa by a fixed percentage each year on the forecast horizon. Essentially, this is a parametric sensitivity analysis. The forecast period length was set to $T = 5$ years.



Table 3

Sensitivity Analysis of the Market Capitalization

Change by indicators	Absolute, in billion RUB	Relative, in %
Costs	12 480	50.1
Capital intensity	560	2.2
Growth rate	797	3.2
Discount rate	7218	29.0
Post-forecast growth	3537	14.2
Period length	662	2.7

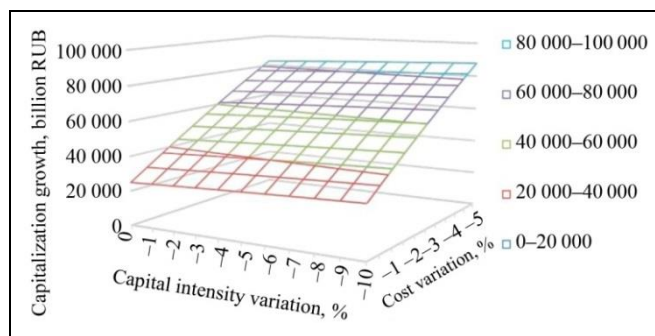


Fig. 5. Parametric analysis of market capitalization variations based on DCFs.

A 1% reduction in costs and capital intensity approximately leads to an 52% increase in market capitalization.

To double market capitalization by improving the efficiency factors, it is necessary to reduce costs and capital intensity by 2% annually throughout the forecast period; to triple market capitalization, they shall

be reduced by 4% annually. Given the size of the enterprises, this is a large-scale challenge.

Note that the “response” of market capitalization differs, and some enterprises are low-sensitive to cost variations. (These enterprises are highly profitable according to the financial statements.)

6. GROWTH FACTORS FOR THE TARGET INDICATOR (STOCK MARKET CAPITALIZATION)

Consider several options for increasing the target indicator value. To implement them, it is necessary to assess opportunities and specify proposals for improving the growth factors of the target indicator (stock market capitalization):

• Market growth driven by the inertial growth of the indicators for the listed enterprises

For the express estimate MC_t^{mul} by multiples, we make two assumptions:

- The market capitalization-to-revenue multiple M_R is constant.
- The GDP-to-revenue ratio $K_{G/R}$ is constant.

Then

$$MC_t^{\text{mul}} = M_R K_{G/R} G_t.$$

Figure 6 shows the estimated dynamics of the stock market capitalization of the listed enterprises under the inertial growth of their indicators. The market capitalization estimates are $MC_{2030}^{\text{inert}} = 78$ trillion RUB and $MC_{2036}^{\text{inert}} = 115$ trillion RUB, or 24% of the GDP. These values are below the targets: 2.7 times for 2030 and 3.1 times for 2036.

Table 4

Parametric analysis of estimated market capitalization variations

Cost variation Δc , in %	Capital intensity variation Δa , in %					
	0.0	–2.0	–4.0	–6.0	–8.0	–10.0
0.0	24 911	26 015	27 055	28 033	28 953	29 818
–0.5	31 208	32 312	33 351	34 330	35 250	36 115
–1.0	37 391	38 495	39 534	40 513	41 433	42 298
–1.5	43 462	44 566	45 605	46 583	47 504	48 369
–2.0	49 422	50 526	51 565	52 544	53 464	54 329
–2.5	55 273	56 377	57 417	58 395	59 315	60 180
–3.0	61 017	62 121	63 161	64 139	65 059	65 924
–3.5	66 655	67 759	68 799	69 777	70 697	71 562
–4.0	72 189	73 293	74 332	75 310	76 231	77 096
–4.5	77 620	78 724	79 763	80 741	81 662	82 527
–5.0	82 949	84 053	85 093	86 071	86 991	87 856

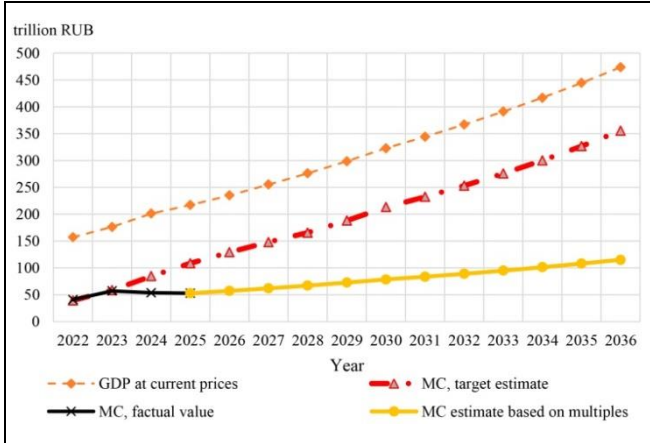


Fig. 6. Market capitalization dynamics in the inertial scenario.

Therefore, we arrive at the following outcome: a significant gap is expected from the target indicator MC_{2036}^{tar} . Additional measures are needed to achieve the target.

• Market growth driven by the IPOs of new enterprises

The issues of IPOs for Russian enterprises prior to the 2008–2009 crisis were studied in [33]. As noted, most Russian enterprises have low investment appeal but significant potential to increase it. The market capitalization growth potential often remains unrealized due to management's limited expertise in market evaluation and its driving factors. The success of an IPO depends on meeting the stock exchange's formal requirements and, moreover, on the enterprise's actual investment appeal. According to the authors' forecast, the annual number of IPOs in Russia will reach 100.

In 2024, $N_{2024}^{IPO} = 14$ Russian enterprises went public; in 2025, the number of offerings fell to $N_{2025}^{IPO} = 4$ issuers. The total market capitalization of the IPOs of the enterprises that went public in 2024 amounted to¹ $\Delta MC_{2024}^{IPO} = 642$ billion RUB, with an average of $\Delta MC_{2024, ave}^{IPO} = 46$ billion RUB. The total market capitalization of enterprises that went public in 2025 amounted to² $\Delta MC_{2025}^{IPO} = 357$ billion RUB, with an average of $\Delta MC_{2025, ave}^{IPO} = 89$ billion RUB for the issuers Dom.RF, JetLend, GloraX, and Basis. The average market capitalization of an enterprise at its IPO can be estimated as $\Delta MC_{2026, ave}^{IPO} = (\Delta MC_{2024, ave}^{IPO} + \Delta MC_{2025, ave}^{IPO}) / 2 = 68$ billion RUB; in subsequent

¹ Which Companies Went Public in 2024. URL: <https://t-j.ru/ipo-2024> (Accessed February 12, 2026; in Russian.)

² Which Companies Went Public in 2025. URL: <https://t-j.ru/ipo-2025> (Accessed February 12, 2026; in Russian.)

years, it is expected to grow proportionally to the GDP at current prices.

For the target number of IPOs, $N_t^{IPO, tar} = 20$, the estimated increase in market capitalization will amount to

$$\Delta MC_t^{IPO, tar} = N_t^{IPO, tar} \Delta MC_{2026, ave}^{IPO} \prod_{i=1}^t (1 + g_i).$$

The estimated increase in market capitalization based on the target IPO value will be $\Delta MC_{2030, sum}^{IPO, tar} = 8$ trillion RUB by 2030 and $\Delta MC_{2036, sum}^{IPO, tar} = 22$ trillion RUB by 2036. Figure 7 shows the market capitalization dynamics in the inertial scenario with additional IPOs (with their target number). Clearly, the total market capitalization does not increase significantly when IPOs are conducted according to the target scenario.

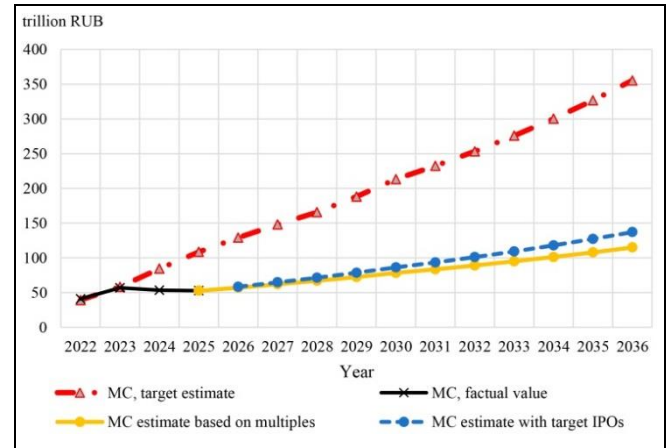


Fig. 7. Market capitalization dynamics: the inertial scenario and target IPOs.

Consider the scenario with intensified IPOs. This scenario assumes a gradual increase in the number of IPOs, exceeding the baseline scenario by $N_t^{IPO, tar}$. In this scenario, $N_{t, sum}^{IPO, int} = 3664$ IPOs are conducted. The total increase in market capitalization will amount to $\Delta MC_{2036, sum}^{IPO, int} = 98$ trillion RUB. Figure 8 demonstrates the market capitalization dynamics in the inertial scenario with intensified IPOs. The scenario with intensified IPOs significantly increases the total market capitalization.

The total volume of investments in the shares of issuers through IPOs will amount to

$$I_{2036, sum}^{IPO, int} = \Delta MC_{2036, sum}^{IPO, int} d^{IPO},$$

where d^{IPO} is the average share of stock offered in an IPO.

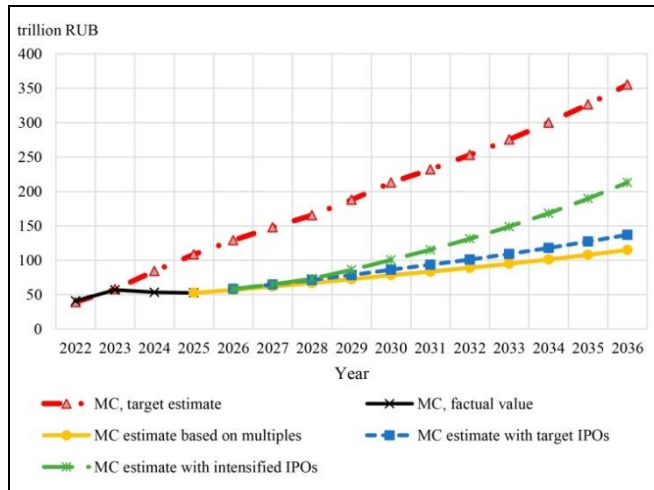


Fig. 8. Market capitalization dynamics in the inertial scenario with intensified IPOs.

For estimates based on a typical value of $d^{IPO} = 10\%$, investments in IPOs will amount to $I_{2036, sum}^{IPO, int} = 9.8$ trillion RUB.

Therefore, we arrive at the following outcome: based on the model estimates, inertial growth and IPOs (as stipulated by the financial market development strategy and the extended scenario) are insufficient to achieve the national targets.

Consider possible options for increasing stock market capitalization by improving the operational efficiency of enterprises: reducing costs, capital intensity, and risks.

• Cost reduction measures

Studies by the Institute of Economic Forecasting, the Russian Academy of Sciences, show trends in per unit parameters regarding the use of primary material resources, labor intensity, and energy intensity [34, 35]. Overall, direct costs can be estimated to decrease by 2% per year. Note that such a reduction in direct costs is not reflected in the enterprises' financial statements because direct costs are not itemized, and there exists a fairly stable linear regression between total costs and revenue.

The experience of intra-corporate cost reduction procedures and measures was considered in [36–38].

We apply models (2) and (3) to estimate the increase in market capitalization under cost variations. The target scenario is a gradual reduction in costs by $\Delta c^{tar} = -1\%$ by 2036.

Figure 9 presents the parametric calculation results for market capitalization variations under cost variations (for each enterprise in the sample under analysis). The market capitalization response to cost varia-

tions can differ significantly among different enterprises.

The additional increase in market capitalization will amount to $\Delta MC_{2030}^c = 16.3$ trillion RUB by 2030 and $\Delta MC_{2036}^c = 59.8$ trillion RUB by 2036.

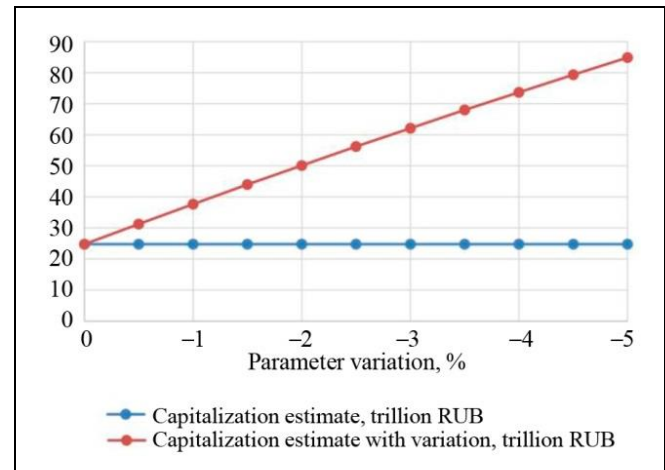


Fig. 9. Parametric analysis of market capitalization variations under cost variations.

• Capital intensity reduction measures

The estimates based on the approaches [38, 39] indicate the potential to optimize business processes and reduce the financial and production cycle by 20–40%.

We apply models (2) and (3) to estimate the increase in market capitalization under capital intensity variations. The target scenario is a gradual reduction in capital intensity by $\Delta a^{tar} = -5\%$ by 2036.

The additional increase in market capitalization will amount to $\Delta MC_{2030}^a = 3.3$ trillion RUB by 2030 and $\Delta MC_{2036}^a = 12.2$ trillion RUB by 2036.

• Ratings (risk reduction/discount rate reduction)

One reason for higher discount rates in Russia is the lower ratings of the country and local enterprises assigned by international agencies (Standard & Poor's, Moody's, and Fitch Ratings).

A. Damodaran provided an estimate of the additional discount rate premium (spread) for developing countries relative to the US discount rate [40, 41]. The discount rate premium for Russia (country risk) is 1.75–2% during “stable” periods and 3.9% during periods of political turbulence [42].

For the calculations, we assume the scenario of a gradual decrease in the discount rate by $\Delta r = -1\%$.

According to the repeated calculations by formulas (2) and (3), the additional increase in market capitali-

zation will amount to $\Delta MC_{2030}^r = 9.1$ trillion RUB by 2030 and $\Delta MC_{2036}^r = 33.4$ trillion RUB by 2036.

• The combined efficiency improvement scenario.

Finally, we apply model (2) and (3) to estimate the increase in market capitalization under $\Delta c = -1\%$, $\Delta a = -5\%$, and $\Delta r = -1\%$ (the simultaneous reduction of costs, capital intensity, and the discount rate).

According to the repeated calculations, the additional increase in market capitalization will amount to $\Delta MC_{2030}^{c,a,r} = 35.9$ trillion RUB by 2030 and $\Delta MC_{2036}^{c,a,r} = 131.6$ trillion RUB by 2036.

Figure 10 and Table 5 illustrate the scenarios of market capitalization dynamics: inertial, with intensified IPOs, with improved operational efficiency, and the combined one.

Therefore, we arrive at the following outcome: the combined scenario (the inertial growth of market capitalization with intensified IPOs and operational efficiency improvement) almost ensures the achievement of the national targets by 2036.

CONCLUSIONS

This paper has been devoted to the analysis and forecasting of Russia's target indicators using an example of stock market capitalization targets. An enlarged scheme has been proposed to study the achievement of these targets, including a model of influence factors for target indicators.

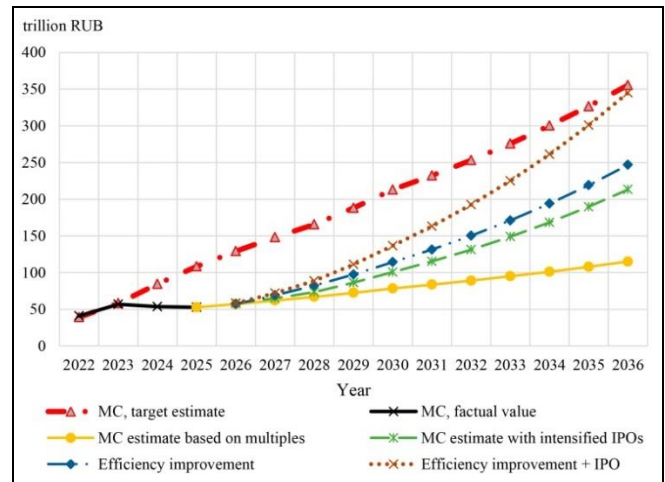


Fig. 10. Scenarios for stock market capitalization dynamics.

We have considered the increase in market capitalization by improving operational efficiency using a discounted cash flow model in an analytical form. The following key efficiency factors have been identified within this model: reduction in costs, capital intensity, and discount rate (risks).

Finally, the scenarios for achieving the target indicators through inertial and intensive growth have been examined. As shown, the inertial scenario is insufficient to ensure the target values of the indicators. According to model calculations, the intensive growth scenarios allow the targets to be achieved.

The calculations have been based on public data from the Moscow Exchange, the Federal State Statistics Service, and the Federal Tax Service of the Russian Federation.

Table 5

Scenarios for stock market capitalization growth, in trillion RUB

Indicator	Year				
	2025	2026	2027	2030	2036
GDP at current prices	217	235	255	323	474
Market capitalization (target estimate)	109	129	148	213	355
Market capitalization (factual value)	53	—	—	—	—
Market capitalization (multiples-based estimate)	53	57	62	78	115
Market capitalization, with target IPOs	—	58	65	86	137
Market capitalization, with intensified IPOs	—	58	65	101	213
Market capitalization, with operational efficiency improvement	—	57	69	114	247
Market capitalization, with operational efficiency improvements and intensified IPOs	—	58	72	137	345



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This paper was recommended for publication by M.I. Geraskin, a member of the Editorial Board.

*Received February 22, 2026,
and revised March 14, 2026.*

Accepted April 8, 2026

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Cite this paper

Dranko, O.I., Rezhnikov, A.F., Stepanovskaya, I.A., Bogomolov, A.S., and Kushnikov, V.A., Scenario Simulation of the Achievement of National Targets: a Case Study of the Russian Stock Market. *Control Sciences* 4, 52–64 (2026).

Original Russian Text © Dranko, O.I., Rezhnikov, A.F., Stepanovskaya, I.A., Bogomolov, A.S., Kushnikov, V.A., 2026, published in *Problemy Upravleniya*, 2026, no. 4, pp. 61–76.



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