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# Sustainability Assessment of Savings System in Russia

V.V. Litvin<sup>a</sup>✉, V.V. Maslennikov<sup>b</sup>, N.A. Amosova<sup>c</sup>

Financial University, Moscow, Russia

<sup>a</sup> <http://orcid.org/0000-0002-1677-8138>; <sup>b</sup> <http://orcid.org/0000-0001-6199-9979>;<sup>c</sup> <http://orcid.org/0000-0002-4232-1406>

✉ Corresponding author

## ABSTRACT

Resource and financial support for economic growth is the most important economic task that requires an instant solution. A study of nature, institutional structure, efficiency and sustainability of the savings system in Russia may contribute to this solution and is defined as the **subject** of this research. The **aim** of the article is to test the methodology for the sustainability assessment of the savings system in Russia. The methods of system analysis and mathematical statistics represent the **methodological basis** of the research. The fundamental nature and consistent development of savings relations and processes for the economy provided **the starting point** of the study. The authors consider national savings as an investment resource, which is formed through the institutional structure of the national savings system and the instrumental environment, and their sufficiency ensures stable economic growth of the country. **The central point of the research** within the framework of the article is the analysis of the intermediary function of the savings system, which optimizes the main parameters of the savings market – the demand for savings resources and their supply, and well as their financial stability assessment. **The main result** of the study provides further development of the previous approach to understanding the essence of the system of national savings (NSS) and its sustainability assessment, in terms of the economic security of the country as well. In addition, the authors attempted to assess the stability limits of the national savings system using mathematical statistics tools. The subject area of the article and the results of the study provide new knowledge about the nature, conditions and sustainability assessments of national savings systems and significantly contribute to the scientific discussion of the current and future trends of the world economy development and economic growth supported by finances and resources.

**Keywords:** national savings system; stability limits of the savings system; sustainability assessment of the savings system; economic growth

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## INTRODUCTION

The 2008 crisis revealed the inability of the modern economy to properly fulfill its predictive function. Not a single direction of economic research, not a single school of economics predicted the causes and forms of its occurrence, the consequences and their destructive force. This induced researchers from different countries to revise economic studies, postulates, well-established and generally accepted theories. The second decade of the XXI century was marked by the emergence of a whole series of fundamentally new, unconventional studies. The most revolutionary changes took place in the financial sector of the economy.

The new study largely redefined the role and importance of the financial sector, financial markets, and institutions in the economic system at all levels, as well as at the global level. If earlier the influence of the financial sector on economic growth was assessed not only as positive but as constantly positive, the dominance of the financial sector seemed to be the norm, in the post-crisis period the postulates gave way to situational cautious answers to rather specific questions.

At the beginning of that period, studies that differentiated financial systems based on quantitative methods of assessment were of particular interest. The financial structure ratio (FSR) and the financial structure gap (FSG) were proposed at that time and adopted by international monetary and financial institutions. In our opinion, this may lead to a change in the typology of financial systems and international financial architecture.

The attempts to prove the ambiguous influence of the development of the financial sector of the country's economy on its macroeconomic indicators were considered as a logical continuation of the research. Financial development was no longer identified solely with the financial depth of the mar-

ket; it is subjected to multivariate analysis. Financial development and financial system were assessed by a matrix of indicators ( $4 \times 2$ : depth, availability, efficiency, stability of financial institutions, and financial markets). Based on this approach, the World Bank created the Global Financial Development Database (GFDD), which included 111 indicators for the countries of the world. The International Monetary Fund started to use a truncated matrix ( $3 \times 2$ , excluding financial stability indicators) to calculate the Financial Development Index (FDI), which, being integral, was derived from 20 indicators.

Studies of the financial possibilities boundaries (limits) and the inconsistency of various parameters of financial development, for example, financial depth and stability, were rapidly developing; sustainable development and inclusion [1, 2]; technological revolution and measurement of financial inclusion [3].

Systemic risk management had a special place in modern research, establishing the relationship between regulation and financial stability [4], assessing the efficiency of the financial sector and its segments [5], financial involvement of participants in economic life and stability [6, 7]. Theories of sustainable finance and adaptive markets were developing simultaneously [8].

All this was evidence of significant positive developments in financial research over the past decade. At the same time, some problems remain undeveloped, despite the exceptional scientific prospects and applied value.

Such topics, in our opinion, include the study of savings systems on a global scale and at the level of national economies, issues of their typology, analysis of the institutional structure, safety, efficiency, assessment of the current state, sustainability, risk profile, modeling of variable development. Russian economists attempted to address these issues in their works [9].

### **NATIONAL SAVINGS SYSTEM: ESSENCE, INSTITUTIONAL STRUCTURE, SUSTAINABILITY, SECURITY**

In the context of globalization, accompanied by integration processes in all spheres of public life, the problem of sustainable development of national savings systems that form the resource and financial potential of the economic development of a particular country acquires particular relevance. For the Russian Federation, maintaining the sustainability of the national savings system in modern conditions is especially important in the light of economic sanctions and the priority of the formation of investment resources from internal sources. Before examining the problem of assessing the sustainability of the Russian savings system, let us define the concept.

Attempts to reveal the essence of the savings system have been undertaken for a long time, while the approaches to understanding the essence of the definition are different. Some authors proceed from the fact that in a narrow sense the savings system is an element of the resource management system of a separate commercial bank and, in a broad sense, a subsystem of the country's banking system [10, p. 60]. In our opinion, this point of view simplifies the concept of a savings system, since it does not consider other most important subsystems and elements due to the variety of forms of savings and the functioning of institutions that mediate their circulation. In the literature there is also a broader definition of the savings system, which interprets it as a combination of several basic elements: savings in the form of deposits in bank accounts, savings in insurance policies, and savings in securities [11, p. 8]. This approach is also incomplete since it does not take into account all the variety of subjects and objects of the system.

The position of the authors who approach the understanding of the savings system through the unity of all subjects of savings

in the national economy seems convincing, noting that the savings system allows accumulating not only the savings of individuals in commercial banks but also the savings of "charitable and economic organizations and government bodies of different levels" [12, p. 17]. Inclusion in the savings system of a wider range of subjects than households allows expanding the list of its subsystems and elements by adding other forms of savings. One can partially agree with the interpretation of the savings system as an independent object and subsystem functioning in a market economy, as a "complex, constantly developing material socio-economic system, the basis of which is the process of organizing 'savings' relations (savings process) of subjects and objects of savings ... concerning the subject ... savings regulated by the state" [13].

In the above approach, savings are considered as the subject of the savings system, and the object is the set of savings institutions. Sharing the authors' position on the need for a separate comprehensive study of the savings system, we consider savings in all the variety of their forms as its object, and refer savings and investment institutions to savings subjects, along with individuals, enterprises of the real sector and the state.

In our opinion, the object of the savings system is distinguished by various forms of savings. This means that the essence of the savings system should be determined, considering all forms of savings: natural-material, financial, intangible non-financial (know-how, patents, licenses, etc.), as well as a set of institutions that mediate their circulation and transformation into investments. Based on this, the national savings system will be considered as a multi-level complex of institutions and relations arising between economic entities in the course of the savings process associated with the formation, exchange, and use of savings resources within national borders [9, p. 65].

One of the most important criteria for structuring economic systems is functionality. This is due to the specifics of the activities of various groups of institutions (organizations, structures) included in the system, each of which performs a special priority function (a number of functions). If the savings system is structured in accordance with the functional criterion, it should include (mostly) the banking system, insurance, pensions, the system of stock institutions, foreign exchange markets, as well as markets for real and innovative (intellectual) investments, part of the system of information and analytical and educational institutions, as well as credit unions, investment companies, and funds, purely savings institutions (savings banks, savings, and loans, postal savings institutions, etc.).

An increase in the resource and financial potential of the national economy directly depends on the ability of the institutional structure of the national savings system to accumulate savings, mediate their circulation and increase the efficiency of use. In this regard, the timely solution to the problem of sustainable development of the national savings system is of particular relevance.

The sustainability of the national savings system in a broad sense will ensure a reduction in the number of bankruptcies of its institutions (commercial banks, credit cooperatives, mutual funds, insurance organizations, non-state pension funds, etc.), prevention of non-return of savings, serious violations of the intermediary functions of the system, prevention of breaking ties between subjects of savings relations. Within this approach, the sustainability of the savings system can be viewed in terms of the continuum in which the national savings system can function within a stable corridor bordering on instability.

Sustainability analysis of a savings system is intended to help identify threats to its operation and development, identify di-

rections for ensuring stability, and design appropriate policy responses. The focus should be on systemic pressures and linkages to assess the sustainability and vulnerability of a system, as well as the economic, regulatory, and institutional determinants of sustainability and stability. In addition, it is necessary to analyze whether the system exhibits vulnerability that could trigger a crisis, exacerbate macroeconomic shocks, or impede policy responses to these shocks. Depending on the results of the analysis, a method is chosen to solve the problems of ensuring the sustainability of the savings system: constant prevention (when the national savings system is in a stable corridor), corrective actions (when the national savings system is approaching instability) and decisive measures (when the national savings system is experiencing instability).

In the works of Russian and foreign scientists, ensuring the sustainability and stability of economic systems within national borders is considered as a necessary condition for economic security [14–18]. This follows from the numerous definitions of the authors, who combine two key concepts — “sustainability” and “safety”. As noted in the scientific literature [14, 15], the category “security” is complex and covers the most important segments of the internal life of the state and society, manifesting itself in interdependent and closely interrelated components — economic, military, political, environmental, transport security, etc.

Some authors associate national security with government measures aimed at ensuring sustainable economic development and social stability [16, p. 3]; the stability of the monetary and financial system is considered a condition for the economic security of the country, which, due to the excess profit of speculative operations, may face multiple headwinds [17, p. 11]; consider this as a degree of protection against the negative impact of internal and external threats

that can be neutralized by creating a new institutional environment to increase the competitiveness of the national economy through innovation, technological breakthrough, and the development of nanotechnology [18, p. 301].

Discussing the development of the financial sector on a global scale for the next decade, foreign experts identify the stability and sustainability of financial systems as a priority problem that poses a threat to national economic security [19]. The following arguments are given: severe financial crises contribute to a long-term recession, which significantly hinders economic growth (on average, a financial crisis leads to a 10% reduction in production); a poorly managed financial sector may lead to inequality, which is now becoming a threat to the stability of national economies. Thus, it is concluded that the stability and sustainability of the functioning of economic systems are priority issues that need to be addressed in the next decade.

The IMF's Global Financial Stability Report focuses on emerging market finance and highlights the risk of sustained market access for emerging market borrowers amid threats to global financial stability.\* In the foreign literature, there is a concept of "sustainable financing", which, unlike traditional financing, should take into account the financial, social, and environmental benefits [20].

Russian economists characterize the current state of the Russian economy as unstable and associate this with a large number of threats entailing risks that undermine the possibility of implementing priority tasks of socio-economic development, creating economic problems of national security [21, p. 8]. It is proposed to solve this problem together with the implementation

of national and state interests, which implies the development of a mechanism for socio-economic reforms in close connection with the tools to neutralize threats to the instability of the global financial system [22, p. 210]. In the Russian scientific literature, there is an explanation of economic security from the point of view of the highest level of abstraction. Proceeding from the fact that absolute safety presupposes the absence of danger, the presence of a contradiction in the "danger – safety" system leads to its qualitative development since the reaction of any stable system to danger must be its improvement. Thus, the concept of security is interpreted not as a state of security, but as keeping the main threats at a socially acceptable level (within certain limits) [23, p. 32].

In our opinion, the economic security of a country depends on its resource and production potential, investment support, the quality of institutions and the ability to update the institutional structure. When assessing the category "economic security", one way or another, this category interacts with the concepts of "threat" and "threat to security". Both concepts are currently not legally established but are widely used in the scientific literature. At the same time, using the "security" category, it is necessary to clearly understand what exactly is a threat to "economic security", what the threat comes from, to whom (what) it is directed, what is provided (guaranteed), how is measured and standardized.

Since the resource potential of the national economy is formed within the framework of the national savings system, ensuring its sustainable functioning is the most important goal of establishing a strategy for the long-term economic security of the state. Threats to the national savings system that affect its security are everything that will hinder the development of relations between the participants of the savings system.

\* Global Financial Stability Report (2019). International Monetary Fund. October 16, 2019. URL: <https://www.imf.org/en/publications/gfsr> (accessed on 05.05.2020).



In our opinion, *internal* threats in the current conditions can be:

- instability of the socio-economic situation in the country;
- high risks of non-return of savings;
- loss of jobs and other sources of income, due to the global lockdown caused by the COVID-19 outbreak;
- decrease in the profitability of investments in various types of assets;
- high inflationary and devaluation expectations;
- unpredictable prospects for maintaining an acceptable level of financial support, etc.

*External* threats include:

- costly confrontation (including the new arms race);
- high dependence of the economy on external economic conditions;
- ideological and value expansion and destructive informational and psychological impact on the citizens of the country from outside;
- uncertainty and fragile stability of the system of international relations;
- outside interference into internal affairs of the state.

The internal and external threats to the country's security are determined by a combination of objective and subjective factors. The first is associated with the miscalculations of the domestic policy pursued in the Russian Federation, and the second is associated with the escalation of international tension.

To minimize threats and ensure the positive dynamics of the national savings system, it is necessary to maintain its stability within certain limits. According to Pareto optimality, the maximum stability of the dynamic equilibrium of the system is the state of its equilibrium with the highest possible efficiency. Pareto optimality is achieved with the maximum possible efficiency of resource allocation and characterizes the maximum stability of the dynamic

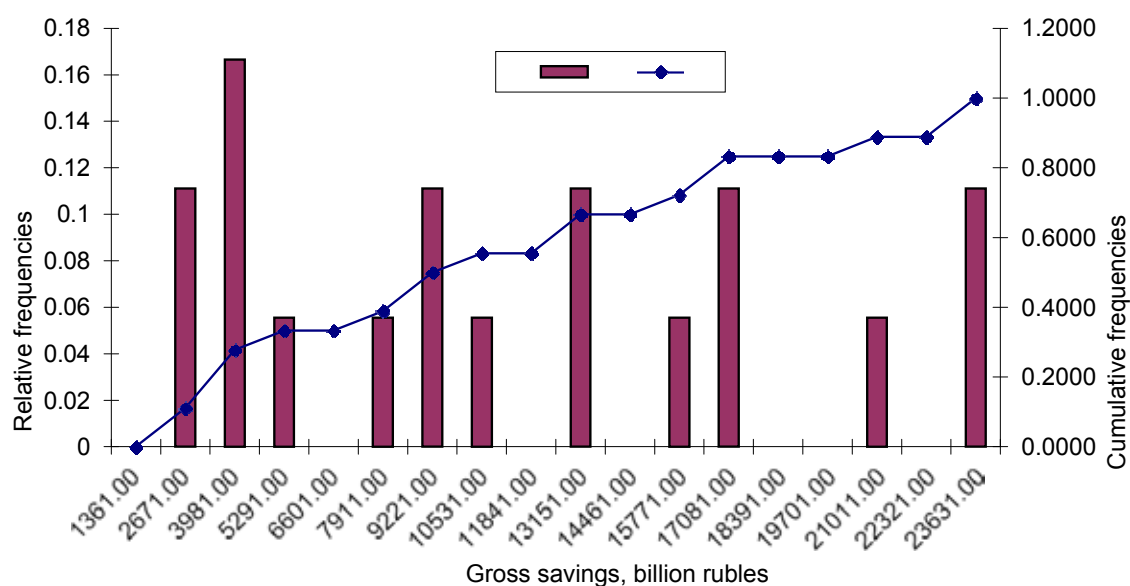
equilibrium of the economic system. The state of the minimum possible efficiency determines the limit of the minimum stability of the equilibrium of the system.

In the process of development, the efficiency of the economic system accumulates. After reaching the maximum for a certain stage of development (Pareto optimality), a redistribution of efficiency occurs when the new state is disorganized. The process of accumulating the effectiveness of the economic system has its limits — it ends in a crisis. This is followed by the transformation and transition of the system to a new stage of development. The state of the dynamic equilibrium of the system between the limiting maximum and minimum parameters is stable.

#### FINDING THE STABILITY LIMITS OF THE RUSSIAN SAVINGS SYSTEM

A method of mathematical statistics was applied to find the stability limits of the national savings system and the factors affecting it. The indicators of the efficiency of the Russian savings system over the past 18 years were considered. During this period, both positive and negative results were achieved (the growth rates of indicators decreased). We are interested in the positive results of its functioning in terms of the impact on the system development process. They will be considered as parameters to ensure stability. Negative values bring the system out of a stable state. This is important for the development of the system, since any complex system develops dynamically, passing from one stable state to another as a result of instability.

We determine the indicators of the stability of the Russian savings system for the selected stage of development. To do this, we analyze the dynamics of gross and net savings in the Russian economy over the period 2001–2018 using statistical indicators of relative and cumulative frequency. The parameters under study in terms of mathematical statistics represent a sample,



**Fig. 1. Relative and cumulative frequencies of gross savings in the Russian Federation for the period 2001–2018**

Source: Federal State Statistics Service. National accounts. Consolidated account. Account for using disposable income [www.gks.ru](http://www.gks.ru)

in this case, 18 units for each value, i.e. the general population consists of 18 units (indicators characterizing the activity of the savings system) with homogeneous samples: one of them is a sample of positive values of indicators, the other is of negative ones. Since the stability of the system is ensured by positive parameters, we select a homogeneous sample with positive values and carry out subsequent analysis using the tools of mathematical statistics.

The total number, which indicates how many times a unit was found in the data, will be considered as the frequency, and the ratio of the frequency of units to the sample size as the relative frequency. The relative frequencies show how often certain values of the analyzed parameters have occurred over the past 18 years [24].

To check the correspondence of the observed data to objective reality, there is a statistical hypothesis — an assumption about the form or individual parameters of the probability distribution, which is subject to verification using the available data. We consider the null hypothesis, according to which all events happened naturally (by chance). Typically, the null hy-

pothesis is formulated in such a way that, based on observations, it can be rejected with a predetermined probability of error (significance level). In statistics, the most common level of significance is  $\alpha = 0.05$ . A value equal to  $1 - \alpha$  is a confidence level (reliability level), i.e. the probability recognized as sufficient in order to confidently judge the adopted statistical decision. Accordingly, the possible choice of values of confidence probabilities is 0.95, 0.99, and 0.999.

Determining how a given unit belongs to the general population is not difficult if the distribution in the population is normal. For this, the three-sigma rule is used: 99.7% of all units are within  $M \pm 3\sigma$ . This rule applies in most other cases as well. When the number of sampling units is less than 30, the limits of the confidence interval are calculated by the formula

$$[M - s; M + t_{np}s],$$

where  $M$  is the mean,  $s$  is the standard deviation,  $t_{np}$  is the value of the Student's  $t$ -distribution with the number of degrees of freedom  $n$  and the confidence level  $p$ .

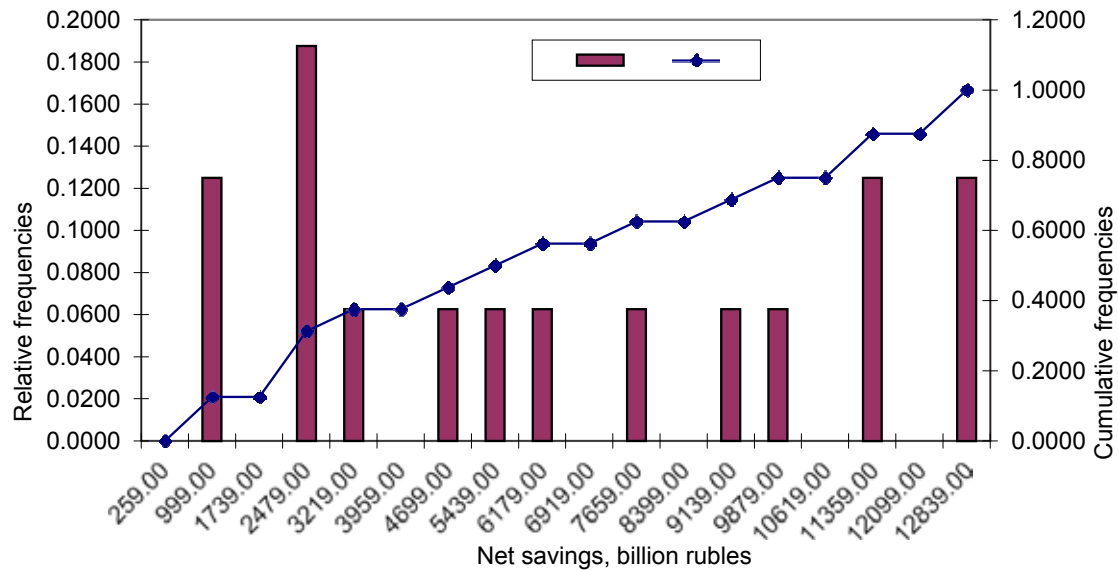


Fig. 2. Relative and cumulative frequencies of net savings in the Russian Federation for the period 2001–2018

Source: Federal State Statistics Service. Investment in Russia [www.gks.ru](http://www.gks.ru)

Since the number of units used in our analysis is less than 30, the confidence level is assumed to be 95% (this is half the confidence interval for the mean). Thus, a unit that falls within the obtained interval will belong to this population with a probability of 0.95. For the outlying case, we multiply the obtained confidence interval by  $\sqrt{n}$ . In this regard, in our opinion, there is no need for a separate probability distribution calculation.

To find the confidence interval limits, we will use the Descriptive statistics of the MS Excel. Fig. 1 shows data on the relative and cumulative frequencies of the value of gross savings for the period 2001–2018.

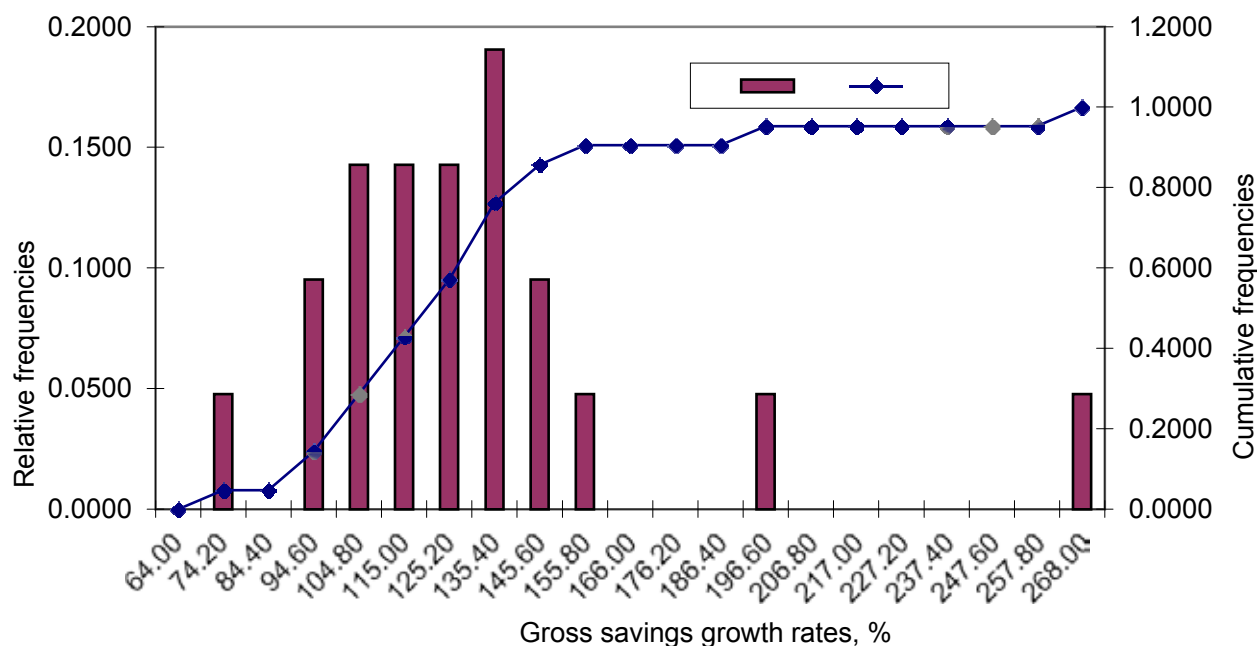
The data obtained indicate that during the period under review, the most common indicators of gross savings were close to RUB 3981 billion. To refine the result, let us find the limits of the 95% confidence interval for the mean and outlying cases of the entire sample of gross savings values. The reliability of the result is equal to half the confidence interval for the population mean. Using MS Excel, we will estimate the mean of gross savings for the period 2001–2018 and find the limits of the

confidence interval. The average value is RUB 10693.87 billion, i.e. with a probability of 0.95, the population mean is in the range of RUB 10693.87  $\pm$  RUB 3546.80 billion.

To find the confidence limits for the outlying case, it is necessary to multiply the above confidence intervals by  $\sqrt{n}$ , where  $n$  is the number of values (in this case, 18 values). The outlying case falling within the range of RUB 7147.06–14240.67 billion is considered to belong to the population with a probability of 0.95, going beyond these limits can be rejected with a significance level of 0.05. Thus, the range of changes in the value of gross savings in the period under review ranges from RUB 7147.06 to RUB 14240.67 billion. Comparing the results obtained, we conclude that the value of RUB 3981 billion is outside the 95% confidence interval for the mean, so the optimal parameter should be sought as the mean of the following gross savings: RUB 9221, 13151, 17081 and 23631 billion, which is RUB 15443.5 billion.

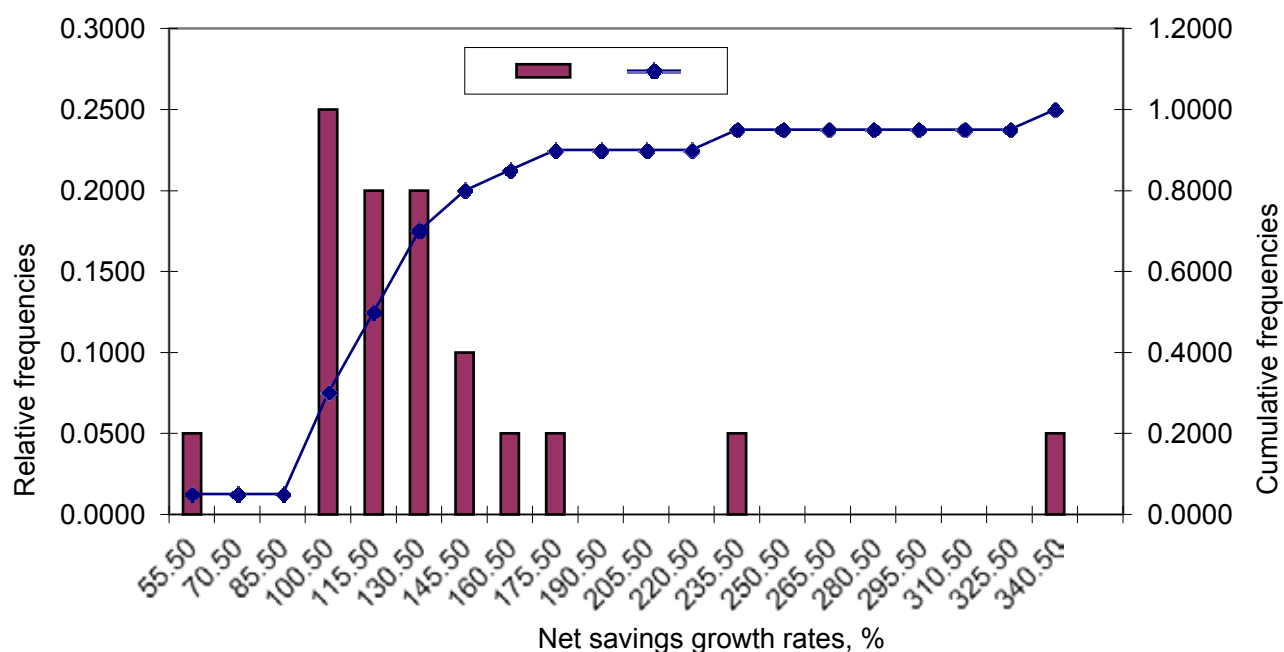
Considering the economic changes in the country, it is advisable to narrow the period under review to 2008–2018. In this case, the average value is RUB 15827.72 billion,





**Fig. 3. Relative and cumulative frequencies of gross savings growth rates in the Russian Federation for the period 1999–2018**

Source: Federal State Statistics Service. National accounts. Consolidated account. Account for using disposable income [www.gks.ru](http://www.gks.ru)



**Fig. 4. Relative and cumulative frequencies of net savings growth rates in the Russian Federation for the period 1999–2018**

Source: Federal State Statistics Service. National accounts. Consolidated account [www.gks.ru](http://www.gks.ru); Federal state statistics service. Investment in Russia [www.gks.ru](http://www.gks.ru).

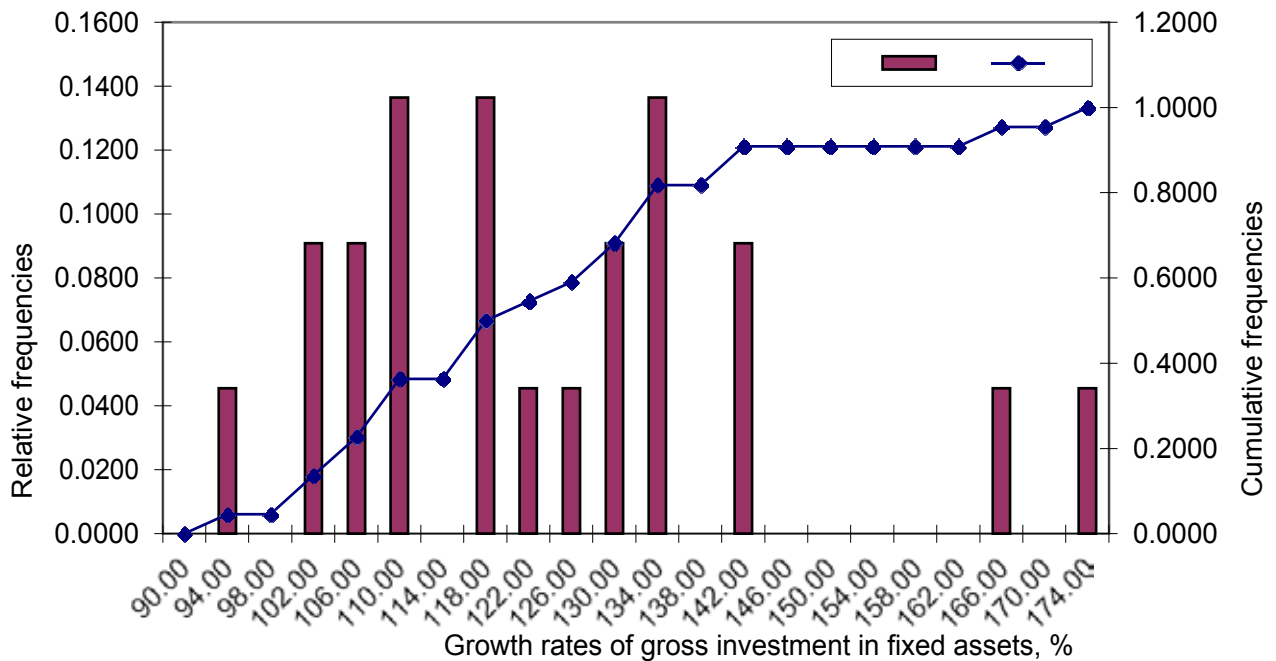


Fig. 5. Relative and cumulative frequencies of growth rates of gross fixed investment in the Russian Federation and for the period 1999–2018

Source: Federal State Statistics Service. Investment in Russia [www.gks.ru](http://www.gks.ru).

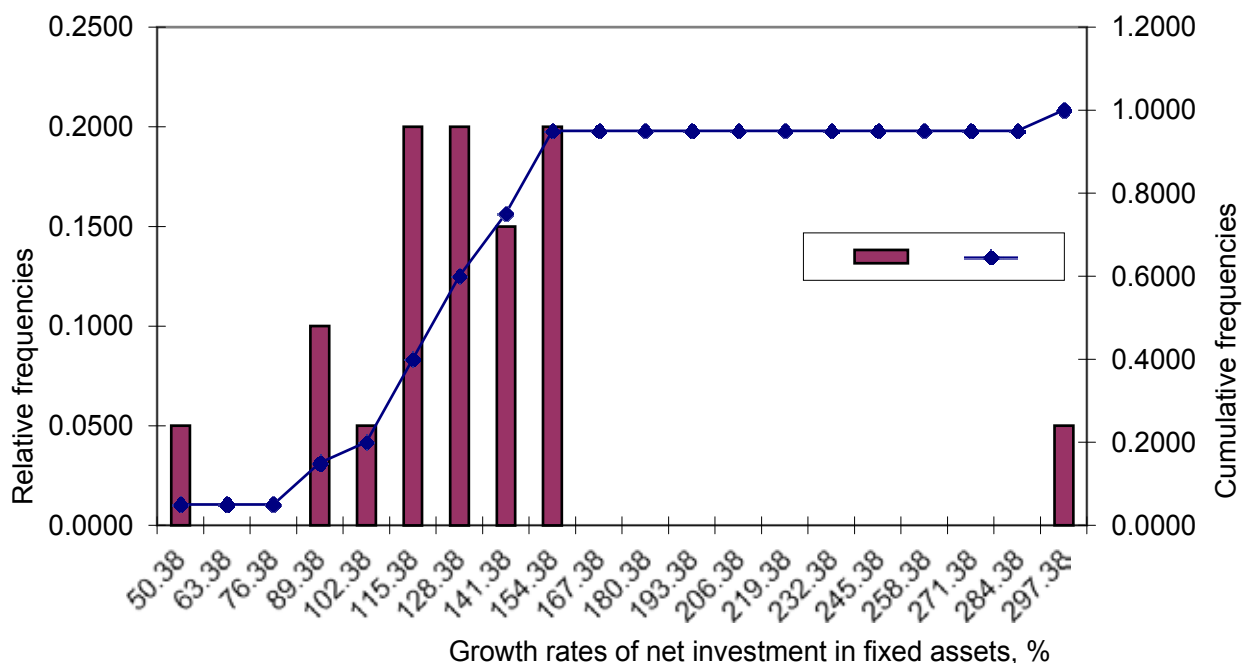


Fig. 6. Relative and cumulative frequencies of growth rates of net fixed investment for the period 1999–2018

Source: Federal State Statistics Service. Investment in Russia [www.gks.ru](http://www.gks.ru).

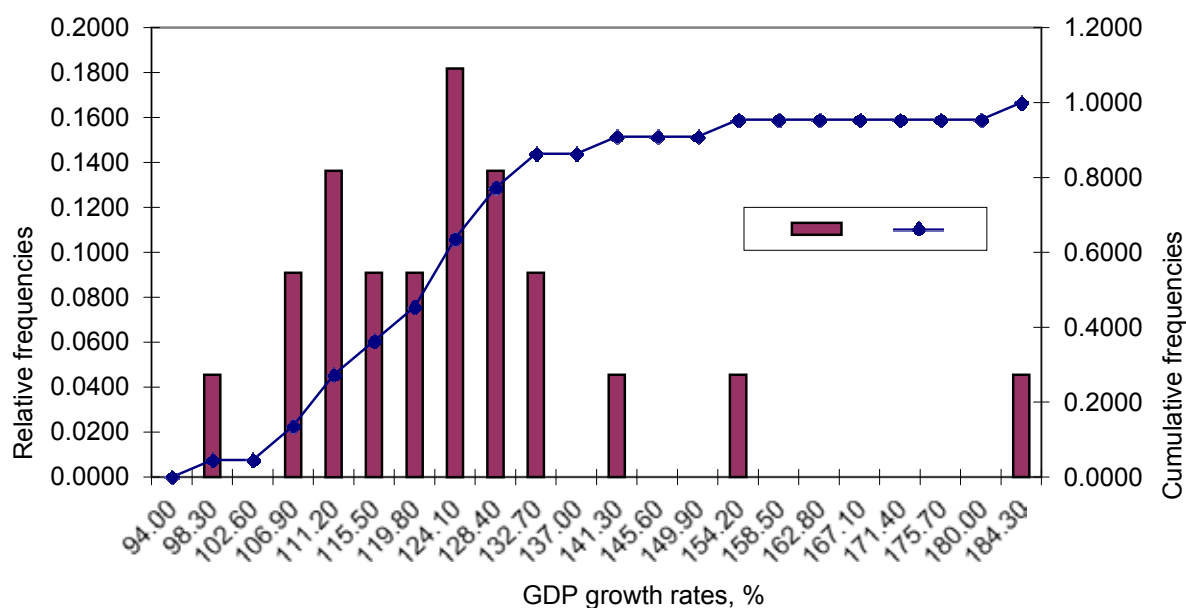


Fig. 7. Relative and cumulative frequencies of GDP growth rates during 1999–2018

Source: Federal State Statistics Service. National accounts. Consolidated account. Production account [www.gks.ru](http://www.gks.ru).

i. e. with a probability of 0.95 the population mean is in the range of RUB  $15827.72 \pm 3642.02$  billion. Consequently, the change in the value of gross savings in the range from RUB 12185.70 to 19469.74 billion is considered safe for the country's economy.

Data on relative and cumulative frequencies of net saving for the period 2001–2018 (Fig. 2) allow us to find the safe limits of change in the value of net savings, which are RUB 8665.79–12577.17 billion.

To forecast the resource potential trends of economic growth in the country, it is advisable to find the safe growth rate limits on gross and net savings. To do this, we use the above-mentioned approach.

Dynamics of the relative and cumulative frequency of growth rates of gross and net savings for the period 1999–2018 shows that during the period under review, the frequency of values of the growth rates of gross savings was 135.4% (Fig. 3).

The mean for the gross savings parameter is 126.56% with a probability of 0.95, the mean for the general population is in the range  $126.56 \pm 10.82\%$ . Thus, the optimal growth rate of gross savings is at the level of 135.40% per year. For the growth rate of net

savings with a probability of 0.95, the mean for the general population is in the range of  $130.62 \pm 16.17\%$ . Consequently, the growth rates of net savings — 115.50 and 130.50% — may be considered optimal (Fig. 4).

To create conditions for economic growth, it is important not only to maintain the growth rates of gross and net savings at a certain level but also to use them productively for investment purposes. In this regard, it is of interest to identify the relationship between savings, investment, and GDP — the final indicator of economic growth.

The data obtained on the relative and cumulative frequencies of the studied values allowed us to estimate their parameters, which are most frequent in the analyzed period: for gross investment in fixed assets, the growth rates are 110.00, 118.00 and 134.00%; for net investments in fixed assets — 115.38, 128.38 and 154.38% (Fig. 5, 6).

On this basis, using Excel, we will find the mean and optimal values of the growth rates of the studied parameters, as well as the confidence interval limits for them. Thus, the mean value of the growth rate of gross investment in fixed assets for the

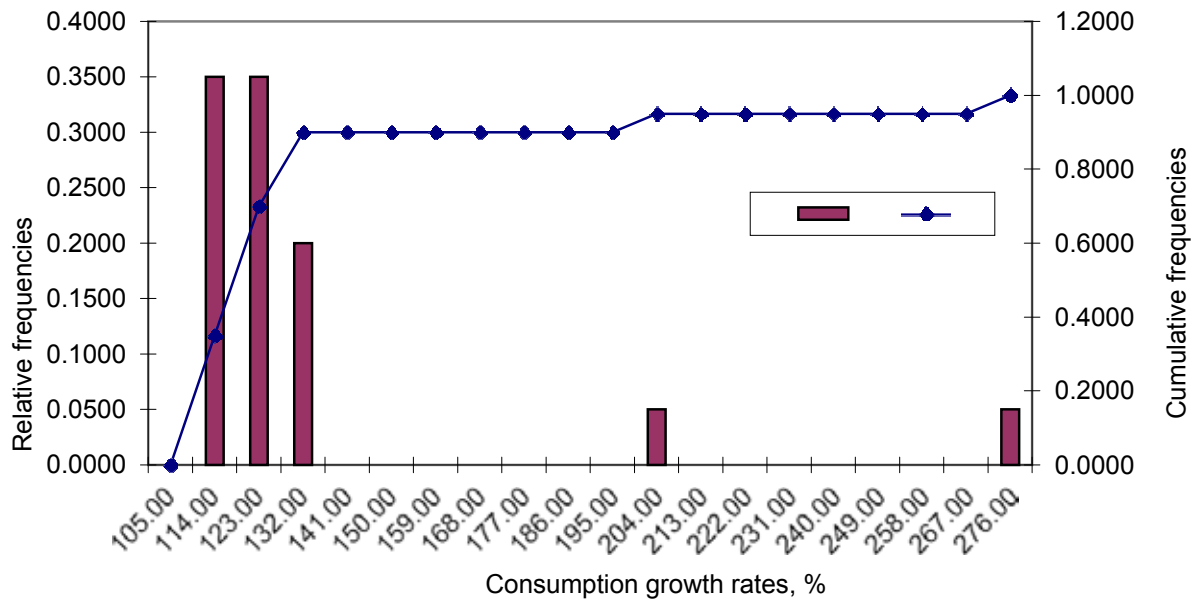


Fig. 8. Relative and cumulative frequencies of consumption growth rates for the period 1999–2018

Source: Federal State Statistics Service. National accounts. Consolidated account. Invoice for goods and services [www.gks.ru](http://www.gks.ru).

Table

**Parameters (nominal indicators) defining the stability limits of the savings system in Russia**

Indicator	The interval for the population mean of indicators	Safe limits of values change (stability limits of NSS)
Gross savings growth rate	$126.56 \pm 10.82\%$	115.75–137.38%
Net savings growth rate	$130.62 \pm 16.17\%$	114.45–146.78%
Growth rate of gross investment in fixed assets	$123.46\% \pm 6.33\%$	117.13–129.79%
Growth rate of net investment in fixed assets	$125.03 \pm 12.00\%$	113.03–137.03%
Consumption growth	$127.97 \pm 9.52\%$	118.45–137.49%
GDP growth rate	$112.52 \pm 12.31\%$	100.21–124.82%

Source: compiled by the authors.

period was 123.46%, the mean interval for the general population was  $123.46 \pm 6.33\%$ , and the optimal value of the growth rate of investment in fixed assets was 118%. The parameters of the growth rate of net investment in fixed assets were: mean value — 125.03%, change interval —  $125.03 \pm 12.00\%$ , optimal value — 128.38% per year.

Among the GDP growth rates — the resulting indicator of macroeconomic dynamics, the most common value for the period under review — the growth rate is at the level of 124.10% (Fig. 7). According to calculations, the mean value of the indicator was 112.52%, the range of change was 100.21–124.82% ( $112.52 \pm 12.31\%$ ), and the optimal value was 124.10%.

In our opinion, the dynamics of consumption in the economy is of particular interest, since it determines the trends in aggregate demand and current savings. Fig. 8 illustrates that for the period 1999–2018 the most frequent consumption growth rates were 114.00 and 123.00%, with a mean value of 127.97% (Fig. 8).

Based on the mean for the entire population, which is in the range of  $127.97 \pm 9.52\%$ , the safe change limits of the consumption growth rate were 118.45–137.49%. This gives the optimal level of consumption growth rate for the period — 123.00%.

According to the results obtained in the reviewed period, the limits of change in the growth rate of gross and net savings, namely, the growth rate of gross savings 115.75–137.28%, the growth rate of net savings 114.45–146.78%, provided:

- 1) growth rates of gross investment in fixed assets — 117.13–129.79%;
- 2) growth rates of net investment in fixed assets — 113.03–137.03%;
- 3) consumption growth — 118.45–137.49%;
- 4) GDP growth rates — 100.21–124.82% (nominal indicators).

These parameters can be considered as the stability limits of the national savings

system at this stage of development (see Table) since they are obtained based on a sample of positive values, i.e. those that ensured positive dynamics of the savings system, and, accordingly, its sustainability.

The revealed dependencies determine the percentage of GDP change as a result of an increase in gross savings: when the value of gross savings changes by 1%, GDP growth is 1.143%. Thus, having determined a certain rate of GDP growth as a priority of the economic strategy, it is possible to set targets for the parameter of national savings and justify the directions of institutional reforms to ensure the sustainability of the savings system.

## CONCLUSIONS

*A review of the foreign and domestic scientific literature* on the functioning of national savings systems, the optimal functioning of savings institutions, the behavior of participants in the savings process, indicators and factors to ensure the sustainability of savings systems, approaches to the sustainability assessment showed that, despite the research conducted on savings at the micro-level, a wide range of issues remains unresolved. The issue of the sustainability assessment of national savings systems is among them. The attempt to find “working” applicable studies for developing a methodology for the sustainability assessment of the Russian savings system was not successful.

*The features of the proposed methodology for the sustainability assessment of the Russian savings system* are as follows:

- 1) for the first time, the analysis of the results of its functioning was carried out on the basis of the assessment of the dynamics of gross and net savings using the parameters of the relative and cumulative frequency;
- 2) only positive results of the functioning of the savings system (growth rate increase



of indicators) were considered as parameters that ensure its sustainability;

3) the stability limits of the Russian savings system were determined on the basis of the relationship and interdependence with the results of the functioning of the real sector of the economy — gross and net investment in fixed assets and GDP, the resulting indicator of economic growth.

*The calculation of the parameters that determine the limits of the stability of the Russian savings system shows that a close relationship between the growth rates of savings, investments, and GDP in the Russian economy ensures the sustainability of the*

national savings system, which requires the development of an effective mechanism to transform savings into investments, improve the institutional structure of the savings system, create a system of incentives and guarantees for the subjects of savings relations.

*Prospects for future research* of the identified problems are seen in the identification of cyclical lags in the mutual influence of gross and net savings and investments, consumption, and GDP on the Russian economy, the development of economic policy tools considering small and medium investments and savings cycles.

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## ABOUT THE AUTHORS



**Valeriya V. Litvin** — Cand. Sci. (Econ.), Assoc. Prof., Department of Financial Markets and Banks, Financial University, Moscow, Russia  
Val.litwin2015@yandex.ru



**Vladimir V. Maslennikov** — Dr. Sci. (Econ.), Prof., Pro-rector of Research, Financial University, Moscow, Russia  
vv-masl@mail.ru



**Nataliya A. Amosova** — Dr. Sci. (Econ.), Prof., Department of Financial Markets and Banks, Financial University, Moscow, Russia  
NA.Amosova@mail.ru

### ***Authors' declared contribution:***

**Litvin V. V.** — developed the conceptual framework of the manuscript, justified the new methodology, collected statistical data, designed tables and graphical representation of the results.

**Maslennikov V. V.** — defined the problem, supervised the research and testing of the new methodology.

**Amosova N. A.** — performed the critical analysis of sources, interpreted and described the results, wrote the conclusions of the manuscript.

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