Vol. 18 • No. 1 • 2024

THE WORLD OF WNE NEW ECONOMY

ISSN 2220-6469 (Print)
ISSN 2220-7872 (Online)

WORLD OF NEW ECONOMY

JOURNAL OF SCIENTIFIC HYPOTHESES AND SUCCESSFUL BUSINESS DECISIONS

DOI: 10.26794/2220-6469

The edition is reregistered
in the Federal Service for Supervision
of Communications,
Informational Technologies and Media Control:
PI No. ФС77-82263
of 23, November, 2021

Publication frequency — 4 issues per year

Founder: Financial University

Indexed in databases: CrossRef, DOAJ, Ebsco, Dimensions, EconLit, EconBiz, RePec, eLibrary.ru, Russian Index of Science Citation (RINTs), etc.
A journal included in the first category of the List of the VAC's peer-reviewed scientific publications of the Higher Attestation Commission (K1) on scientific specialties:
5.2.1. — Economic theory (economic sciences),
5.2.3. — Regional and sectoral economics (economic sciences),
5.2.4. — Finance (economic sciences),
5.2.5. — World Economy (Economic Sciences),
5.2.6 — Management (economic sciences)
All articles of journal "The World of the New Economy" are published with a digital object identifier (DOI)
The Journal is distributed by subscription.
Subscription index: 42131 in the consolidated catalogue "The Press of Russia"

The journal is included into the list of periodicals recommended for publishing doctoral research results by the Higher Attestation Commission

Journal Certificate PI No. ФС77-82263. of 23, November, 2021. Issued since 2007. Founders: Financial University

Vol. 18, No. 1/2024

Founder and editor of the magazine from 2007 to 2015 Doctor of Economics, Professor N.N. Dumnaya

Editor-in-chief
S.N. Silvestrov

Science journal editorship manager
V.A. Shadrin

Publishing editor
Yu.M. Anyutina

Translator
I. A. Osipova

Reference Manager
V.M. Alekseev

Proofreader
S.F. Mihaylova

Makeup
E.A. Smirnova

Editorial office address: 125167, Moscow, Leningradskiy prospekt, 53, room 5.6
Tel.: +7(499) 553-10-74 (internal 10-88).
E-mail: julia.an@maul.ru; wne.fa.ru

Signed off to printing: 24.05.2024
Format 60 × 84 1/8
Order № 589
Printer's sheet 17

Printed in the Department of Polygraphy of the Financial University (Moscow, Leningradskiy prospekt, 49)

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-6-17
UDC 336.02,336.7(045)
JEL G17

On the Issue of Coordinating the Objectives and Instruments of Financial and Monetary Policies

A.G. Siluanov
Financial University, Moscow, Russia

ABSTRACT

The relevance of the issue of mutual influence of the goals and instruments of financial and monetary policy increases during periods of economic instability. External and internal macroeconomic shocks can undermine the financial stability of the state and have a negative impact on both price and financial stability. In this regard, there is a need to adjust both financial and monetary policies based on harmonization of the instruments of financial and monetary regulation. The purpose of this study is to develop the theoretical, methodological and applied foundations for coordinating the goals and instruments of monetary and financial policies. The article concludes with the results obtained in the course of the research.

Keywords: financial policy; financial stability; money-credit policy; price stability; tools for financial and monetary regulation

For citation: **Siluanov A.G. On the issue of coordinating the objectives and instruments of financial and monetary policies.** ***The World of New Economy.*** **2024;18(1):6-17. DOI: 10.26794/2220-6469-2024-18-1-6-17**

INTRODUCTION

The issues of efficiency and effectiveness of the state financial policy, optimisation of its goals, methods and tools are still relevant and are studied by scientists regardless of the phase of the economic cycle, but they become especially important in periods of economic crises and macroeconomic instability. External and internal macroeconomic shocks can undermine the financial stability of the state, have a negative impact on price and financial stability. Hence, there is a need to develop and implement sound financial policy in coordination with monetary policy implemented by the monetary regulator.

The state financial policy is traditionally understood as a joint activity of the authorities and financial regulator aimed at ensuring stability of the financial market and its individual sectors, maintaining stability of the entire financial system of the country. Monetary policy, in turn, in most countries of the world is aimed at price stability and is implemented by central banks, which, on the one hand, have the status of a certain independence from the state, but, on the other hand, carry out monetary regulation of economic processes in coordination with the legislative and executive authorities. The results of monetary policy implementation over the last ten years show that it is designed to ensure price stability in combination with the solution of problems of financial stability, employment, reliability of the payment system, and economic growth. Therefore, there are theoretical and practical issues of establishing the relationship between financial and price stability, the need for interaction between governments and central banks; the problems of "cross-sectional" influence of instruments and objectives of financial and monetary policy.

LITERATURE REVIEW

A significant number of scientific works by Russian and foreign authors are devoted to the problem of interrelation of financial and monetary policy. Conventionally, the list of works can be divided into three groups.

Scientists of the first group have conducted research on the influence of the state financial policy and financial stability on the conditions and results of the monetary policy implementation of the monetary regulator. For example, Yueli Xu et al. describe the impact of financial development as a result of financial policy on the effectiveness of monetary policy in developing countries [1]. Studies show that China's financial development enhances the transmission effect of monetary policy in general. Viral V. Acharya et al. come to similar conclusions and prove that the lack of financial stability reduces the effectiveness of transmission channels of monetary policy mechanism [2].

Tran Thi Kim Oanh et al. examine the impact of access to financial services on financial and price stability in countries with different levels of population wealth [3]. The authors argue that in countries with low levels of wealth, the availability of financial services increases financial stability and reduces inflation. And where the level of wealth is high, the availability of financial services increases financial instability, which leads to long-term inflation.

The study by Xiao-Lin Li et al. investigates the cyclical features and dynamic secondary effects of the relationship between monetary policy cycles and financial cycles in China during 1998–2018. [4]. The authors argue that the five cycles exhibit strong synchronisation in terms of response to shocks. The results of the study confirm the importance of analysing the financial cycle in monetary policy decisions.

Martin Tobal and Lorenzo Menna argue that financial instability leads to higher inflation and monetary policy faces the need to search for a trade-off in key rate decisions to ensure not only price stability but also financial stability in emerging market economies [5].

M.V. Ershov et al. describe the impact of public financial policy on the conditions of monetary policy implementation [6]. Using the example of developed and developing countries, the authors focus on the tacit role of the monetary regulator

as a creditor of the government in the crisis period, which ambiguously affects the achievement of price stability by central banks.

M.A. Abramova et al. also study the impact of the state financial policy on the monetary policy of the monetary regulator [7]. Scientists note the positive impact of measures to ensure the stability of the financial system in the context of external shocks on price stability in the context of their restraining effect on devaluation of the exchange rate and volatility of stock market indices.

The authors of the second group conducted research on the impact of monetary policy on the financial stability of the state, which they consider as the main goal of financial policy. Hao Wang et al. on the example of data on China prove that monetary policy can contribute to financial stability in the post-crisis period, especially in the short term [8]. Researchers Aswati R. Nair and B. Anand also study the possibility of using monetary policy as a tool to achieve financial stability [9]. Their results show that asset price targeting as an alternative to the popular inflation targeting regime can be one of the effective ways to contain financial instability and subsequent economic downturns.

Researchers also write about the communication effects of the impact of monetary policy on the financial system. Conor Parle in his study assesses the direct impact of the ECB (European Central Bank) communication within the framework of press conferences on the financial market [10]. The author argues that market participants perceive information from press conferences as news about the future state of the economy and not only about changes in interest rates. Francisca Collingro and Michael Frenkel found that financial market participants react more strongly to monetary policy communication signals during the recovery period after the financial crisis [11].

Xiaoyun Wei and Liyan Han note that unconventional monetary policy instruments are much more effective in terms of influencing the stock and currency markets [12]. The authors conclude that if the monetary policy is aimed at stimulating financial markets, then to achieve the desired effect, it may require a tighter coordination with other macroeconomic policies, primarily with fiscal, tax and budgetary policies.

K.V. Krinichansky and N.E. Annenskaya study the impact of price stability as the main target of monetary policy on the financial development of the state [13]. The scientists prove that fluctuations in the price level in the economy affect the emergence of new financial market instruments, i.e., stimulate financial development.

The authors of the third group devote their research to the issues of neutrality of financial systems of developing countries in relation to the monetary and financial policies of the developed countries. Aimit Lakdawala assesses the impact of the US monetary policy on emerging markets on the example of India and argues about a fairly high degree of such an impact [14]. The researcher emphasises that monetary shocks of the US Federal Reserve System are transmitted through the uncertainty channel, affecting the market value of shares. At the same time, the higher sensitivity of the aggregate response is the same for the entire stock market and is not due to the increased dependence of any particular segment on the U.S. monetary policy.

Georgios Georgiadis and Martina Jančoková come to similar conclusions that monetary policy of the US Federal Reserve and the ECB affects financial conditions in small open economies through global and regional financial channels [15]. Continuing this theme, Georgios Georgiadis and Feng Zhu studied the problem of the relationship between monetary policy and financial system openness in the context of the impact of exchange rate shocks on financial markets and monetary decisions of regulators [16]. The authors talk about the importance of the floating exchange rate regime to ensure the independence of the financial system of the state from the monetary policy of other countries.

There is an interesting study by Dongwon Lee, who argues that emerging markets can maintain

monetary autonomy in the face of global financial market volatility, while advanced economies have limited autonomy due to their close and tight financial integration in recent decades [17].

Thus, the literature review on the problem under study allows us to conclude the following:

- financial and price stability are interrelated: it is impossible to ensure financial stability without price stability, and vice versa;
- monetary policy forms conditions for achieving and maintaining financial stability;
- financial policy instruments influence price stability, primarily through their impact on non-monetary factors of inflation;
- financial and price stability in developing countries depends on the monetary and financial policies of the US and Eurozone countries;
- disintegration of the global financial system leads to a decrease in the dependence of financial and price stability in the countries of the world on the monetary and financial policies of the USA and Eurozone countries.

STUDY OF THE RELATIONSHIP BETWEEN PRICE AND FINANCIAL STABILITY IN RUSSIA IN THE CONTEXT OF ENSURING ECONOMIC GROWTH

Price stability from the position of the Bank of Russia means the situation when the annual growth rate of the consumer price index is close to the target value (target) of 4%.[1] Referring to this goal of the monetary regulator, researchers propose to assess the effectiveness of monetary policy based on the calculation of the percentage deviation of actual inflation from the target value [18]. On the one hand, this methodology has some disadvantages: it does not take into account the time lag between the regulator's decision on the key rate and the reaction of the real economy; it does not take into account other monetary objectives of the Bank of Russia. On the other hand, the quantitative parameter proposed by the authors can be used not only to measure price stability in the country (with low inflation), but also serve as an indicator to assess the degree of achievement of the monetary regulator's goal within the inflation targeting regime.

To investigate the relationship between price and financial stability we will use the index proposed by the scientists [18]:

$$I_{ps} = 1 - \sqrt[2]{\frac{i_{fact} - i_{target}}{\max\left(i_{target}; \beta\right)}}, \quad (1)$$

where I_{ps} — is the price stability index; i_{fact} — actual value of annual inflation; i_{target} — target value of annual inflation; β — minimum value of target annual inflation determined by the accuracy of measurement.

Formula (1) takes into account the percentage of deviation of actual inflation from the target value. This deviation can be both positive and negative. Note that too low inflation rate and deflation are discouraging factors of economic development, therefore, negative deviations from the target can also be assessed as a decrease in price stability.

This approach, based on the calculation of deviation of actual values from target values, is also applicable to the calculation of the financial stability index. Moreover, if the calculations of price stability are based on the values of inflation calculated by the consumer price index, for the calculation of financial stability it is important to determine the indicator that would reflect the development of the entire financial system, including public finances, finances of organisations (financial and non-financial) and households. The ratio of annual growth of total financial assets of the economy to the population can be used as such an indicator [19]:

$$I_{fd} = \frac{FA_{gr}}{PN}, \quad (2)$$

where I_{fd} — is the index of financial development; FA_{gr} — annual growth of total financial assets of the economy; PN — number of populations.

[1] URL: https://cbr.ru/dkp/objective_and_principles/

This indicator not only measures the development of the financial system as a whole, aggregating the assets of all its elements, but also indirectly assesses the level of financialisation of the economy.

Based on the approach to calculation of the price stability index, it would be appropriate to assess the deviation of actual values of the financial development index from the target values, but the strategic financial documents do not define the target value of this indicator. In this regard, to determine financial stability, it seems reasonable to assess the deviation of the financial development index from the trend on the basis of regression analysis:

$$T_{fd} = a * t + b, \quad (3)$$

where T_{fd} — is the trend value of the financial development index; *a, b* — model parameters; *t* — the number of the period under study.

Then the index of financial stability will take the form:

$$I_{fs} = 1 - \sqrt[2]{\frac{I_{fd} - T_{fd}}{\max\left(T_{fd}; \gamma\right)}}, \quad (4)$$

where I_{fs} — financial stability index; I_{fd} — actual value of the financial development index; T_{fd} — trend value of the financial development index; γ — minimum value of the financial development index trend determined by the accuracy of measurement.

As with the price stability index, higher values of the financial stability index mean a higher level of financial stability of the state. The results of the calculation of price and financial stability indices are shown in *Fig. 1*.

Figure 2 illustrates the relationship between price and financial stability in Russia during the crisis periods and clearly shows the relative autonomy/interaction of financial and price stability in different periods of economic development. Under conditions of positive economic dynamics, financial and price stability can be ensured under relative autonomy of financial and monetary policies, and the goals and instruments of their implementation do not necessarily have to coincide. However, in crisis periods, coordination of financial and monetary policy is the most important condition for overcoming them and minimising negative consequences for the economy.

Fig. 1. **Indices of price and financial stability in Russia**

Source: compiled by the author on the basis of data: [18]; URL: https://cbr.ru/dkp/objective_and_principles/; https://cbr.ru/statistics/macro_itm/fafbs/; https://rosstat.gov.ru/folder/12781; https://rosstat.gov.ru/statistics/price /

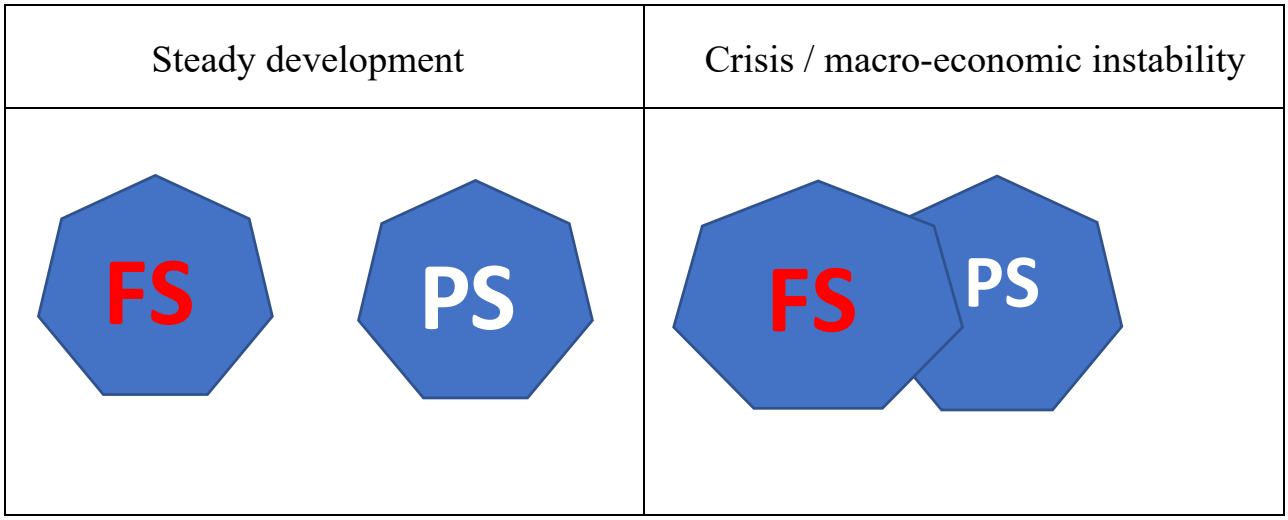

Fig. 2. **Interaction of financial and price stability in different periods of economic development**

Source: compiled by the author.

The analysis of data for 2014–2016 shows that the price stability index is more volatile than the financial stability index: the former is subject to a more severe recession during the crisis, but also recovers faster in response to the monetary anti-crisis measures of the Central Bank. On the one hand, this finding confirms that monetary policy is more flexible than government financial policy (provided that the financial market is well developed). On the other hand, it can be stated that financial stability in 2016–2017 was restored against the background of favourable conditions of price stability. Price growth reduces the predictability of economic development, reducing the volume of investment in the economy; negatively affects confidence in the national currency, weakening its exchange rate; reduces real incomes of households and businesses as consumers of financial services. Therefore, price stability has a significant impact on financial stability.

It is also interesting that financial stability in 2019 was declining, which is also demonstrated by *Fig. 1*. If we turn to the financial accounts of the NAS (national account system) of the Russian Federation[2] and the statistics of the Bank of Russia,[3] it becomes clear that the characteristic negative growth of total financial assets in Russia in 2019 is associated with a decline in demand for the services of non-credit financial institutions against the background of the key rate reduction and the corresponding growth in demand for the services of banks, as well as with the reduction in the volume of budgetary funds in the accounts of financial institutions. Hence, the conclusion about the dependence of financial stability on both the state financial policy and monetary regulation follows.

The volume and structure of assets and liabilities of economic entities are significantly influenced by monetary policy instruments. An increase in the key rate in order to reduce the overall level of consumer prices contributes to the growth of money and credit market rates, due to which the demand for loans from households and businesses decreases, but at the same time the demand for deposits increases, redistributing assets and liabilities in the economy. For example, a sharp increase in the key rate from 9.5 to 20% amid geopolitical instability in 2022, expansion of the volume of refinancing of credit institutions, as well as a significant reduction in the required reserves ratios and increase in the required reserves averaging ratios as monetary policy measures prevented the outflow of funds

[2] URL: https://cbr.ru/statistics/macro_itm/fafbs/

[3] URL: https://cbr.ru/statistics/bank_sector/sors/retro/archiv2/

from the banking sector — the core of the financial system, increasing its resilience to external and internal shocks.

Thus, the empirical study proves the existence of the relationship between price and financial stability in Russia, as well as confirms the impact of the monetary policy of the Bank of Russia on financial stability. Achievement of price and financial stability forms favourable conditions for maintaining *economic* stability as a factor of *economic* growth:

1. Low inflation rate creates an opportunity to improve the efficiency of the budget policy at different levels (municipal, regional, federal), forming predictability of future revenues and expenditures of budgets.

2. Price stability contributes to the welfare of the population by enabling effective financial planning.

3. Under conditions of low inflation, low rates on bank deposits are set, which motivates the population to choose alternative investment instruments with higher returns. In turn, the transformation of savings into investments is an important factor in the development of domestic production.

4. Stability of functioning of credit and payment systems ensures safety of non-cash funds of households and businesses in the conditions of external shocks, uninterrupted money turnover and payments, which creates favourable conditions for economic transactions and builds confidence of economic entities in the financial market regulators.

5. Stability of the investment system, the most important indicator of which is the low volatility of the stock market, ensures the inflow of external and internal investments into the Russian economy, creating opportunities for economic development.

6. Stability of the insurance system provides for the redistribution of risks in the economy,

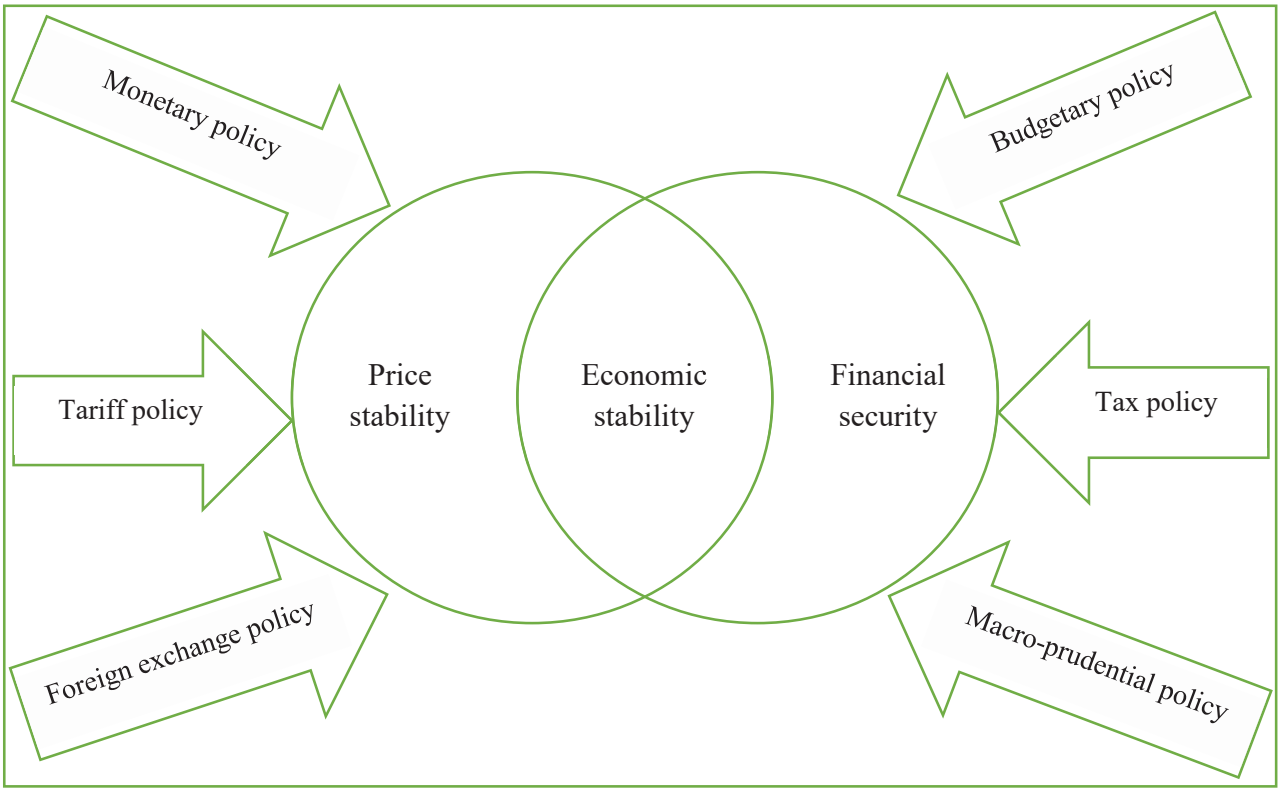

Fig. 3. **The relationship between price and financial stability**

Source: compiled by the author.

reducing the negative impact of external and internal shocks on the sectors of the Russian economy.

Thus, the coordination of monetary policy and various financial policies is necessary to ensure overall economic stability and sustainable economic growth in Russia (*Fig. 3*).

Figure 3 clearly illustrates the need for a comprehensive application of monetary policy instruments in combination with the levers of individual government financial policies to ensure price and financial stability in Russia.

Fiscal (tax and budgetary) policy is aimed at redistribution of funds for the implementation of strategic goals of economic development and improvement of citizens' welfare. At the same time, budget expenditures and taxes influence the money supply, determining the level of supply and demand in the commodity market and inflationary expectations of the population and businesses, which is a factor affecting the price level. Therefore, along with monetary instruments, fiscal levers also influence financial, price and economic stability.

In addition, customs tariff policy has a great potential to influence these parameters. Customs duties affect the prices of imported goods, which determines the general price level in Russia. Tariff quotas contribute to the regulation of export and import volumes, and the competitiveness of domestic producers and the investment potential of the Russian economy depend on it.

Currency (foreign exchange) policy also affects the balance of export-import relations, which determines the investment attractiveness of the domestic market. The stability of the national currency increases the confidence of foreign and domestic investors in the Russian market. Low volatility of the rouble exchange rate also has a positive effect on inflation dynamics due to the effect of transferring prices of imported goods to the prices of domestic goods.

Thus, economic stability is inextricably linked to price and financial stability, which is achieved through the coordination of monetary and financial policies of the government.

STUDY OF THE IMPACT OF GOVERNMENT FINANCIAL POLICY ON PRICE STABILITY

Financial policy, oriented at elaboration of development prospects and statutory and legal regulation of the operation of the financial market and financial institutions, is aimed at achieving financial stability and maintaining financial sustainability.[4] Moreover, while financial stability as a result of financial policy is manifested at any stage of the economic cycle, financial sustainability reveals itself only in crisis periods.

During the geopolitical crisis of 2022–2023, financial stability and financial sustainability in Russia were ensured through a combination of financial and monetary policy instruments.

Currency instruments of the Ministry of Finance of Russia and the Bank of Russia. They have shown high efficiency in terms of achieving financial stability and financial sustainability. In order to prevent the devaluation of the Russian rouble as a threat to financial stability and to increase the confidence of the Russian population in the national currency at the beginning of the geopolitical crisis, restrictions were adopted on foreign exchange operations of residents, on the import of foreign currency; obligations to sell part of foreign exchange earnings by exporters; a special procedure for settlements with foreign persons from unfriendly countries was introduced. These measures did contribute to the strengthening of the Russian rouble (*Fig. 4*), which formed conditions for further stable development of the financial system. In addition, these currency instruments had a significant positive impact on price dynamics in Russia. There was a high correlation between the exchange rate and inflation in the first three quarters of 2022: the correlation coefficient was 0.9524 (*Fig. 4*). Taking into account the fact that

[4] URL: https://minfin.gov.ru/ru/perfomance/finans/

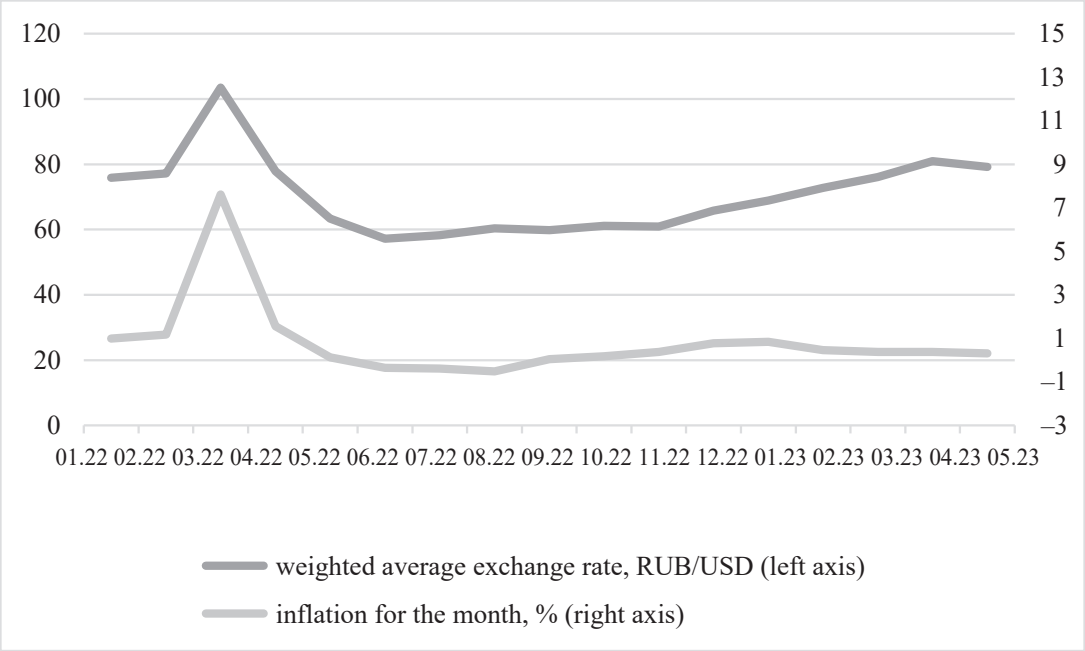

Fig. 4. **Exchange rate and inflation dynamics in Russia**

Source: compiled by the author according to the data of: URL: https://rosstat.gov.ru/statistics/price; https://www.moex.com/ru/markets/currency /

the adopted currency measures were aimed not only at maintaining a stable exchange rate, but also at reducing the dependence of the Russian economy on unfriendly countries, already from the fourth quarter of 2022 there was no correlation between these indicators: the correlation coefficient for September 2022 — May 2023 was 0.1629.

Thus, currency measures of financial policy can have a significant impact on price stability, although this is not the main objective of the state's financial policy.

Budgetary instruments of the Ministry of Finance of Russia. The most effective for achieving financial stability in Russia is the budget rule. From 2017 to 2022, its variant was applied, providing for the purchase (sale) of currency to (from) the National Welfare Fund (hereinafter — NWF) if the Urals oil price exceeds (does not exceed) the cut-off price. The main goal of the budget rule was to reduce the dependence of the rouble exchange rate on energy prices, and it was achieved. At the same time, the National Welfare Fund was replenished to a greater extent with the currency of unfriendly countries. In 2022, the accumulated reserves were frozen, and the budget rule was suspended.

Starting from 2023, a new budgetary rule is in effect, according to which the Bank of Russia buys currency from friendly countries for oil and gas revenues received in excess of the established value and sends it to the National Welfare Fund. In the opposite case, currency from the NWF is sold and its rouble equivalent is used to cover the federal budget deficit. This modification of the budget rule helps to reduce the dependence of the Russian economy on the economies of unfriendly countries, increasing the stability of the financial system. At the same time, the use of the NWF funds to cover the budget deficit means an increase in the money supply, which is a factor of inflation.

In addition to the budgetary rule, countercyclical instruments are also used to ensure financial stability: additional expenditures for the implementation of anti-crisis programmes, expenditures to support businesses and citizens. Additional budget expenditures also entail growth in consumer demand, which, in turn, provokes inflationary pressure. Therefore, the Bank of Russia conducts

monetary policy by coordinating monetary decisions with budgetary decisions.

Macroprudential instruments of the Bank of Russia. In the context of the banking system's liquidity deficit, which developed against the backdrop of geopolitical instability, the Bank of Russia "dissolved" the capital buffer formed earlier by banks at the expense of premiums to risk ratios on unsecured consumer loans and mortgage loans. This measure had a positive effect on the stability of the financial system (financial security), but had no significant impact on price stability.

Thus, the study has demonstrated that financial policy instruments can have both restraining and stimulating effects on price stability. Therefore, to ensure financial and price stability in Russia it is important to coordinate monetary and financial policies with continuous interaction between the Ministry of Finance of Russia and the Bank of Russia. This interaction is currently underway. However, as noted above, in order to achieve the goals of financial and monetary regulation, an important condition is to strengthen the confidence of market participants in government structures — the conductors and implementers of the relevant policy. In the documents of the Bank of Russia and the Ministry of Finance of the Russian Federation concerning the development of the Russian financial market, a significant role is assigned to consumers of financial services. The objective of strengthening retail consumer and investor confidence in the financial market by strengthening its security and improving financial, investment, digital and cyber literacy is constantly being pursued. Special attention is paid to the *expansion of accessibility of financial services*, which generally has a positive impact on the level of financial development and economic growth rates [20].

In order to increase public and business confidence in financial and monetary policy, a high level of *openness* of interaction between the Ministry of Finance and the Bank of Russia should be ensured in the future.

CONCLUSIONS

The conducted research allows us to draw the following conclusions.

Financial stability (as a goal of financial policy) and price stability (as a goal of monetary policy) are most significantly correlated in crisis periods, which is confirmed by the calculations of price and financial stability indices. At the same time, the relationship between these indicators is two-way: a stable price level creates conditions for financial sustainability and financial stability, while financial stability increases confidence in financial institutions and the state, restraining the growth of consumer prices.

Monetary policy instruments can increase the resilience of the credit system to external and internal shocks, increasing the stability of the entire financial system and creating conditions for financial stability.

Financial policy instruments can both contain inflationary pressure (with smoothing exchange rate fluctuations and restraining fiscal policy) and stimulate it (with stimulating fiscal policy).

Reducing the dependence of the Russian economy on unfriendly states leads to positive effects of price and financial stability growth, which confirms the effectiveness of financial policy instruments.

In order to achieve price and financial stability, it is important to coordinate monetary and financial policies, as well as to increase openness in the process of interaction between the relevant government agencies in order to strengthen public and business confidence in them.

REFERENCES

1. Xu Y., Ji X., Zhan S., Zhan M. How do the dual effects of financial development change the transmission of monetary policy? — Evidence from China. *The North American Journal of Economics and Finance.* 2023;68:101952. DOI: 10.1016/j.najef.2023.101952
2. Acharya V.V., Imbierowicz B., Steffen S., Teichmann D. Does the lack of financial stability impair the transmission of monetary policy? *Journal of Financial Economics.* 2020;138(2):342–365. DOI: 10.1016/j.jfineco.2020.06.011
3. Oanh T.T.K., Van L.T.T., Dinh L.Q. Relationship between financial inclusion, monetary policy and financial stability: An analysis in high financial development and low financial development countries. *Heliyon.* 2023;9(6): e16647. DOI: 10.1016/j.heliyon.2023.e166473
4. Li X.-L., Yan J., Wei X. Dynamic connectedness among monetary policy cycle, financial cycle and business cycle in China. *Economic Analysis and Policy.* 2021;69:640–652. DOI: 10.1016/j.eap.2021.01.014
5. Tobal M., Menna L. Monetary policy and financial stability in emerging market economies. *Latin American Journal of Central Banking.* 2020;1(1–4):1000171. DOI: 10.1016/j.latcb.2020.100017
6. Ershov M.V., Tanasova A.S., Tskhovrebov M.P. On monetary and budget approaches in Russia in 2022–2024. *Rossiiskii ekonomicheskii zhurnal = Russian Economic Journal.* 2022;(1):32–49. (In Russ.). DOI: 10.33983/0130–9757–2022–1–32–49
7. Abramova M.A., Dubova S.E., Larionova I.V. On the main directions of the unified state monetary policy for 2023 and the period 2024 and 2025: Opinion of experts of the Financial University. *Ekonomika. Nalogi. Pravo = Economics, Taxes & Law.* 2023;16(1):6–21. (In Russ.). DOI: 10.26794/1999–849X-2023–16–1–6–21
8. Wang H., Xu N., Yin H., Ji H. The dynamic impact of monetary policy on financial stability in China after crises. *Pacific-Basin Finance Journal.* 2022;75:101855. DOI: 10.1016/j.pacfin.2022.101855
9. Nair A.R., Anand B. Monetary policy and financial stability: Should central bank lean against the wind? *Central Bank Review.* 2020;20(3):133–142. DOI: 10.1016/j.cbrev.2020.03.006
10. Parle C. The financial market impact of ECB monetary policy press conferences — A text based approach. *European Journal of Political Economy.* 2022;74:102230. DOI: 10.1016/j.ejpoleco.2022.102230
11. Collingro F., Frenkel M. On the financial market impact of euro area monetary policy: A comparative study before and after the Global Financial Crisis. *Global Finance Journal.* 2020;45:100480. DOI: 10.1016/j.gfj.2019.100480
12. Wei X., Han L. The impact of COVID-19 pandemic on transmission of monetary policy to financial markets. *International Review of Financial Analysis.* 2021;74:101705. DOI: 10.1016/j.irfa.2021.101705
13. Krinichansky K.V., Annenskaya N.E. Financial development: The concept and prospects. *Voprosy ekonomiki.* 2022;(10):20–36. (In Russ.). DOI: 10.32609/0042–8736–2022–10–20–36
14. Lakdawala A. The growing impact of US monetary policy on emerging financial markets: Evidence from India. *Journal of International Money and Finance.* 2021;119:102478. DOI: 10.1016/j.jimonfin.2021.102478
15. Georgiadis G., Jančoková M. Financial globalisation, monetary policy spillovers and macro-modelling: Tales from 1001 shocks. *Journal of Economic Dynamics and Control.* 2020;121:104025. DOI: 10.1016/j.jedc.2020.104025
16. Georgiadis G., Zhu F. Foreign-currency exposures and the financial channel of exchange rates: Eroding monetary policy autonomy in small open economies? *Journal of International Money and Finance.* 2021;110:102265. DOI: 10.1016/j.jimonfin.2020.102265
17. Lee D. Global financial integration and monetary policy spillovers. *Economics Letters.* 2021;202:109820. DOI: 10.1016/j.econlet.2021.109820
18. Gospodarchuk G.G., Zeleneva E.S. Assessing the effectiveness of monetary policy of central banks. *Finance: Theory and Practice.* 2021;25(1):6–21. DOI: 10.26794/2587–5671–2021–25–1–6–21
19. Gospodarchuk G.G., Zeleneva E.S. Stability of financial development: problems of measurement, assessment and regulation. *PLoS One.* 2022;17(11): e0277610. DOI: 10.1371/journal.pone.0277610
20. Sahay R., Čihák M., N'Diaye P., et al. Financial inclusion: Can it meet multiple macroeconomic goals? *IMF Staff Discussion Note.* 2015;(17). URL: https://www.imf.org/external/pubs/ft/sdn/2015/sdn1517.pdf

ABOUT THE AUTHOR

Anton G. Siluanov — Doctor of Economics, Dean of the Department of Finance, Financial University, Moscow, Russia
https://orcid.org/0000-0001-6821-7888
AGSiluanov@fa.ru

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 20.01.2024; revised on 11.02.2024 and accepted for publication on 27.02.2024. The author read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-18-26
UDC 338.2(045)
JEL F63

Prospects for the Implementation of National Projects of the Russian Federation for the Period 2025–2030, Taking into Account the New Model of Economic Development

A.P. Prokhorov
Ministry of economic development of the Russian Federation, Moscow, Russia

ABSTRACT

The relevance of the research topic is conditioned by the prolongation of the implementation of national projects of the Russian Federation, taking into account the new model of economic development of the country proposed by the President of the Russian Federation V.V. Putin. The country's development plans for the coming years, including ensuring technological and personnel or human resources sovereignty, infrastructure development, and the creation of fundamentally new industries, require sound strategies and effective implementation mechanisms. The analysis of promising areas (new tasks) will ensure the effective achievement of the set goals in accordance with the requirements of the new economic model and the challenges of the modern global environment. **The purpose** of this article is to determine the prospects and priorities for the implementation of national projects for the period 2025–2030, taking into account the new model of economic development of the Russian Federation, focused on the supply-side economy. **Methods.** The study was carried out using up-to-date data and analytical reports of public authorities, as well as a theoretical analysis of the basic principles and methodological approaches to the implementation of national projects. **Scientific novelty.** The author, based on the analyzed data, proposes an indicative list of new (reformatted) projects of the 2025-2030 cycle. **Research results.** The article substantiates new tasks that need to be solved within the framework of extending the implementation of national projects, the author finds that national projects should be complemented by breakthrough measures aimed at a significant increase in added value, qualitative growth of the revenue side of budgets of all levels, large-scale attraction of investment resources, creation of new high-performance jobs. **Practical significance.** The results and conclusions of the article can be useful for decision makers on the development and implementation of the country's development policy, for the project offices of government authorities.
Keywords: national projects; national goals; state programs; project management; state strategic planning; portfolio of national projects; new model of economic development

For citation: **Prokhorov A.P. Prospects for the implementation of national projects of the Russian Federation for the period 2025–2030, taking into account the new model of economic development.** ***The World of New Economy*****. 2024;18(1):18-26. DOI: 10.26794/2220-6469-2024-18-1-18-26**

INTRODUCTION

In 2018, the President of the Russian Federation V.V. Putin outlined the key objectives of the national projects for the next 6 years, which were enshrined in the Presidential Decree of 07.05.2018 No. 204 "On National Goals and Strategic Objectives for the Development of the Russian Federation until 2024"[1] (hereinafter — Decree No. 204). The Decree, which is still in force today, includes 47 indicators (parameters) of national projects aimed at the socio-economic development of the country and touches upon all key areas of citizens' life — starting from education and healthcare and up to increasing labour productivity and developing the digital economy [1, 2].

It should be noted that the national development goals are now directly defined in Presidential Decree No. 474 of 21.07.2020 "On the National Development Goals of the Russian Federation for the period up to 2030",[2] and national projects are not the only tool for achieving them. All state programmes and initiatives of socio-economic development are aimed at achieving the national goals.

In assessing the current state of implementation of Decree No. 204 in terms of national projects, it is worth noting that 8 out of 47 indicators have been implemented ahead of schedule, 9 are at the final stage (more than 80% implemented), 17 are under implementation, and 13 are not included in the national projects/programmes. Solving the tasks of the national projects set by the President within the framework of the Decree required a comprehensive approach due to the fact that the target indicators, despite their specificity and measurability, were formulated on a large scale and required the inclusion of additional indicators capable of forming logical chains of business processes to achieve the tasks. As a result, comprehensive instruments capable of becoming a driving force for the industry's development were formed in all areas — national projects.

Due to the advantages of the project approach, consisting in the targeted and rational use of allocated resources, it became possible to ensure the implementation of large-scale social and investment projects within a limited timeframe, increasing the achievement of indicators included in the projects [3–5], on average, by more than 40 p.p. compared to 2018. These changes have significantly accelerated the socio-economic development of the constituent entities of the Russian Federation and the country as a whole.

During the development of national projects, it became clear that the achievement of the indicators chosen as a benchmark for socio-economic development is impossible without improving the quality of infrastructure and social sphere, the development of which is within the sphere of authority of the constituent entities of the Russian Federation [6–8]. That is why, out of 11.1 trillion roubles spent by mid-2023, more than 30% of the federal budget funds were allocated to finance the constituent entities of the Russian Federation, which amounted to 3.7 trillion roubles in the form of inter-budget transfers. At the moment, these amounts exceeded the regional budget's own expenditures for the implementation of measures within the framework of national projects by more than 10% (RUB 3.7 trillion of federal funding versus RUB 3.4 trillion of own regional funds).

Thus, thanks to the national projects, the activities of which have been implemented in more than 70% of municipalities, the constituent entities of the Russian Federation have accelerated the development of the social sphere, created new jobs, and implemented large-scale projects in the areas of transport, housing, education, health care and demography, aimed at ensuring the well-being and improving the standard of living of citizens, as well as providing ample opportunities for self-realisation and unlocking the talent of each individual [9, 10].

[1] URL: http://www.kremlin.ru/acts/bank/43027

[2] URL: http://www.kremlin.ru/acts/bank/45726

The presented article uses the theses of the speech of the President of the Russian Federation V.V. Putin at the St. Petersburg International Economic Forum 2023,[3] analytical annual reports of the Ministry of Economic Development of Russia,[4] analytical annual reports of the Ministry of Finance of Russia,[5] reports of the Analytical Centre under the Government of the Russian Federation,[6] as well as publications of Russian researchers and economists focused on the regional socio-economic development of the country.

WHAT WILL BE THE PRIORITIES FOR THE IMPLEMENTATION OF THE NATIONAL PROJECTS OF THE 2025–2030 CYCLE?

The scale and significance of the tasks to ensure breakthrough socio-economic development of the Russian Federation within a limited timeframe required high concentration of managerial resources, attraction of funds from federal, regional and local budgets, as well as extra-budgetary sources, with simultaneous coordination of actions in the constituent entities of the Russian Federation, relevant sectors and areas of economic activity.

The national projects defined by Decree No. 204 have brought about tangible changes in both large and mostly small towns and villages; in the constituent entities of the Russian Federation, spheres and industries have been brought to a new level. Modern schools, cultural institutions, health care facilities of various levels providing high-quality medical care have been built, and a comfortable urban environment has been created.

An analysis of the success of the national projects shows that despite their positive contribution to the country's development, there is still a huge potential not only to maintain the results already achieved, but also for further development. In this regard, it would be advisable to retain the institution of national projects and continue to work within the framework of the existing set of projects. At the same time, it is important not just to extend the terms of the existing projects, but to form a new composition of activities, to reorient the priority tasks, the achievement of which at the initial stage is impossible to provide with 100% of private financing.

Since the beginning of the implementation of the national projects, the political and economic environment has changed, and therefore the current set of measures no longer fully meets the current challenges. We believe that in the new cycle (2025–2030) within the framework of the national projects it is necessary to focus on the directions and activities that ensure the creation of a new model of economic development (NMED) [11–14]. It implies a large-scale build-up of the production and service sectors, strengthening of the infrastructure network, creation of new industries and facilities, introduction and mastering of modern technologies (based on data and artificial intelligence) with the use of scientific capabilities and creative capacity [14].

The main priority in the formation of the new portfolio of national projects should be their immediate (direct) focus on addressing the 6 key objectives identified by the President during the meeting of the Presidential Council for Strategic Development and National Projects on 15 December 2022,[7] as well as during his Address to the Federal Assembly of the Russian Federation on 21 February 2023[8] (*Fig. 1*).

[3] URL: https://www.vedomosti.ru/economics/articles/2023/06/19/981092-kak-budet-rabotat-predstavlennaya-putinim-novaya-model-razvitiya-rossii

[4] URL: https://www.economy.gov.ru/material/file/f5ef8f3012ce0e063013de4ddf52011a/otchet_o_realizacii_gos_programmy_rf_ekonomicheskoe_razvitie_i_innovacionnaya_ekonomika_za_2022_god.pdf; https://www.economy.gov.ru/material/file/9b08323447cd1956c463979e0dab96a2/itogi_deyatelnosti_za_2022_god_i_zadachi_na_2023_god.pdf; https://wciom.ru/analytical-reviews/analiticheskii-obzor/nacionalnye-proekty-2023-itogi-i-ozhidanija

[5] URL: https://minfin.gov.ru/common/upload/library/2023/10/main/0749_Budget_2024–2026_corr.pdf.

[6] URL: https://ac.gov.ru/uploads/2-Publications/analitika/2022/_%D 1%87.2_web.pdf; https://ac.gov.ru/uploads/2-Publications/analitika/2022/_2021_short.pdf; https://ac.gov.ru/news/page/novosti-prosedsej-nedeli-glazami-ekspertov-ac-5–11-fevrala-2024–27719

[7] URL: http://www.kremlin.ru/acts/assignments/orders/70412

[8] URL: http://www.kremlin.ru/acts/bank/49010

CRITERIA AND PRIORITIES FOR THE FORMATION OF A NEW PORTFOLIO OF NATIONAL PROJECTS

1. The National Project activities should be mainly aimed at solving systemic problems in the short and medium term (until 2030) (which at the initial stage is impossible only through private investment) in areas corresponding to 6 key objectives.

2. The national project should address the development of several spheres and sectors of the economy in interdepartmental cooperation with a single project management centre; special attention should be paid to the interconnection of inter-sectoral activities to ensure maximum synergistic effect.

3. The goals and objectives of a national project should be measured by specific and understandable socio-economic effects. The activities of the national projects can be divided into three groups: prolonged process activities already contained in the national projects (within the basic allocations); ongoing project activities of the current national projects (e.g., construction and reconstruction of drinking water supply facilities, construction of nuclear icebreakers, etc.); new project activities. At the same time, it is not allowed to include in the project new activities of a process nature, which were not previously included in the national projects [maintenance of government bodies and budgetary institutions, fulfilment of public obligations of a permanent nature (social payments, benefits)].

THE PRESIDENT'S NEW MODEL OF ECONOMIC DEVELOPMENT: PROSPECTS FOR COMPOSITION OF A NEW PORTFOLIO OF NATIONAL PROJECTS

The new model of economic development is proposed to focus on domestic demand: to strengthen investment and develop own capital, to support national technologies. At the same time, the economy should remain open to international trade in goods and services.

The model implies a transition to a new level of economic development that not only responds to market conditions, but also actively generates demand. This approach involves expanding production and services, strengthening

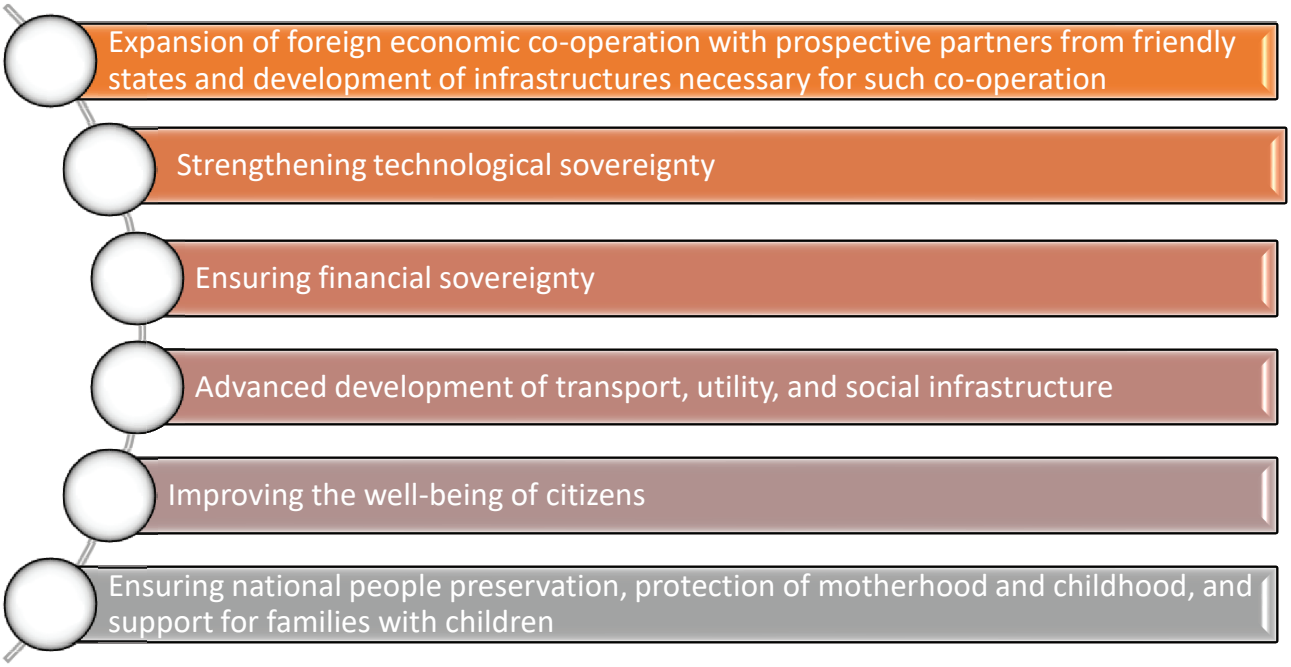

Fig. 1. **Key tasks of forming a new portfolio of national projects**

Source: compiled by the author.

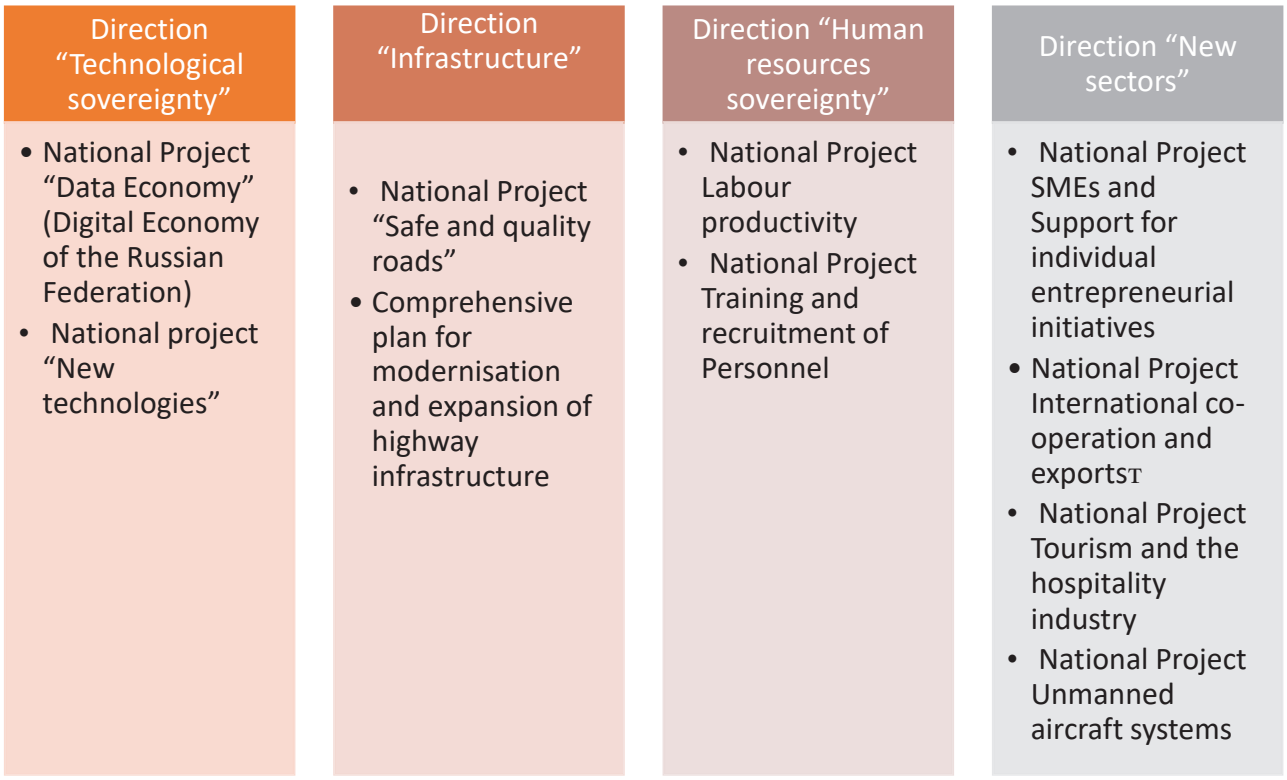

Fig. 2. **The proposed list of new national projects of the 2025–2030 cycle**

Source: compiled by the author.

infrastructure, introducing modern technologies and developing new sectors of the economy even in areas where there is no significant presence yet, but where there is potential for development. The model is simple and logical: on the one hand, striving for economic growth by expanding the production of high-quality goods and services, and on the other hand, stimulating demand for these quality products. To achieve the latter, it is necessary to ensure the availability of qualified specialists on the labour market and to improve the welfare of the country's population as a whole.

Thus, it seems very logical to reformat the current national projects and supplement the list with those that meet the new priorities and criteria, including the 6 key objectives. Below is an indicative list of new (reformatted) projects for the 2025–2030 cycle (excluding the national projects that will be extended, which was mentioned at the meeting of the Chairman of the Government of the Russian Federation M.V. Mishustin[9]), proposed by the author on the basis of the analysed data, which, among other things, will work for the development of the supply-side economy[10] (*Fig. 2*).

Following the results of the meeting held at the end of 2023 under the chairmanship of the First Deputy Prime Minister of the Russian Federation A.R. Belousov, the Ministry of Economic Development of the Russian Federation should create an interdepartmental working group headed by the Minister of Economic Development of the Russian Federation, which in the summer of 2024 will form the basic composition of the activities of the new national projects.

From the author's point of view, let us consider possible directions and tasks of the national projects aimed at the development of the supply-side economy.

[9] URL: http://government.ru/news/50527/

[10] URL: https://tass.ru/ekonomika/18038125

DIRECTIONS AND OBJECTIVES OF NATIONAL PROJECTS WITHIN THE FRAMEWORK OF SUPPLY-SIDE ECONOMIC DEVELOPMENT

1. Direction "Technological Sovereignty". This priority envisages the implementation of national projects that address the creation/implementation of new technological solutions that will enable the formation of integral technological and production chains in various spheres and sectors of the economy, the widespread introduction of big data-based management and, ultimately, the creation of a basis for the transition to the next technological mode. [13, 14].

1.1. National project "Data Economy" ("Digital Economy of the Russian Federation").

The objective of the project — is to transfer the country's economy, social sphere, and public administration to modern principles of work based on data management.

New tasks: implementation of data-based management systems; generation of necessary and quality data.

1.2. National project "New technologies".

The objective of the project is to ensure technological sovereignty, which implies both national control over critical and cross-cutting technologies and their full inclusion in the economic sphere of the country.

New tasks: formation of a technological forecast (foresight) and on its basis — adjustment and prioritisation of the state technological order; implementation of technological projects — "beacons"; fine-tuning of institutional conditions.

The project should also create an organisational framework of scientific and technological activities, providing an order for scientific research with subsequent production of competitive finished products based on these developments [13, 14]. It should be noted that federal executive authorities have formed megaprojects[11] for the development of the supply economy, which are implemented in addition to the national project.

2. Direction "Infrastructure".

It is proposed to include two national projects in this direction: "Safe Quality Roads" and the transport part of the Comprehensive Plan for Modernisation and Expansion of Highway Infrastructure.

New tasks: development of transport and logistics corridors to meet the new needs of exports and imports; increase in cargo flows along international transport corridors (including the directions: North-South, Russia-China, Northern Sea Route, Azov-Black Sea); implementation of measures to eliminate infrastructure constraints, construction of new Highway infrastructure; expansion of the airport network.

3. Direction "Human resources sovereignty". Within the framework of this priority, it is necessary to address the issues of improving the employment structure of the population and increasing its economic activity and mobility, creating high-productive and high-tech jobs. It is also necessary to fine-tune the system of personnel training and retraining oriented to the needs of economic sectors in the future.

3.1. National project "Labour Productivity".

The objective of the project — is to develop the production systems of enterprises, including the application of lean production technologies; launch an ecosystem of digital solutions and retraining of working personnel.

New tasks: to ensure advanced growth of labour productivity by increasing the coverage of enterprises and expanding the list of industries; to form sectoral competence centres for the introduction of lean technologies at enterprises in a particular industry by order of the responsible federal executive body; to create corporate competence centres on the basis of state-owned companies in order to improve their efficiency.

3.2. National project "Training and recruitment of personnel".

The objective of the project — in view of changes in the structure of the economy superimposed on long-term demographic trends, it is required to facilitate both territorial mobility of the population

[11] URL: http://government.ru/news/48571/

and inter-sectoral redistribution of labour force (reduction of geographical and social inequality).

New tasks: adjustment of the education system to new needs: development of secondary vocational (initiative "Professionalitet") and additional education; provision of the system of secondary vocational and higher education with the necessary domestic equipment; state support for the creation of high-tech and high-performance jobs; addressing issues related, among others, to labour and educational migration (initiative "Russia — an attractive country for study and work").

4. Direction "New Sectors". National projects of this group should be oriented towards stimulating the growth of productive forces, development of business and tools to support foreign economic activity, promotion of systemic investment projects, and, as a result, the creation of new industries and markets of the future.

4.1. National project "Small and medium-sized entrepreneurship and support for individual entrepreneurial initiative".

The objective of the project — is to focus on structural changes in both the SME sector (by stimulating the growth of specific indicators of the entities) and the economy as a whole; to increase the share of SMEs in industries oriented towards domestic demand.

This will increase investment, stimulate the growth of productive forces and the level of wages, and create favourable conditions for the development of new industries and the development of own production.

New tasks: to identify indicators that will characterise the elimination of the identified barriers to the qualitative growth of small and medium-sized enterprises.

4.2. National project "International co-operation and export".

The objective of the project: in the conditions of the crisis, disintegration of global production chains and restrictions on international cooperation, the focus should shift to deepening integration with friendly countries (especially with members of the EurAsEC (Eurasian Economic Community), BRICS and SCO (The Shanghai Cooperation Organization), multidirectional and multi-speed development of integration processes.

New tasks: reformatting the mechanisms of preferential crediting and insurance of export supplies and adapting them to the increasingly difficult conditions for Russian products and Russian companies; expanding crediting and insurance programmes for critical import supplies, taking into account the strengthening of secondary sanctions; building the skills and competencies of the personnel of export-oriented companies; developing digital services to support exporters.

4.3. National project "Tourism and hospitality industry".

The objective of the project — is to address the issues of satisfying the demand exceeding supply through domestic tourism and the development of related industries and spheres (trade, catering, transport, culture, construction, etc.; multiplier effect).

New tasks: integrated development of tourist infrastructure in the territories; training of personnel for the industry; increasing the number of rooms (preferential lending for construction of new and reconstruction of existing accommodation facilities, development of small accommodation facilities) and ensuring its utilisation in the off-season.

4.4. National project "Unmanned Aviation Systems".

The objective of the project — is the implementation of key federal projects aimed at the development of such systems in the reporting period.

New tasks: infrastructure development, security, and formation of a specialised certification system for unmanned aerial systems; personnel training; development of advanced technologies; stimulation of demand for domestic unmanned aerial systems; integrated development, standardisation and mass production of unmanned aerial systems and components.

CONCLUSIONS

Based on the analysed data, it can be concluded that the national projects have made a significant contribution to the programme of socio-economic development of the Russian Federation until 2024. Thanks to an integrated approach and targeted use of resources, it has been possible to ensure accelerated development of the social sphere, create new jobs and implement large-scale projects. However, given the changes in the model of economic development, it is necessary to revise the current national projects and supplement them with new ones corresponding to the current tasks and criteria. The list of projects (tasks) of the new cycle (2025–2030) proposed by the author takes into account 6 key tasks of the President and is aimed at comprehensive development of the supply-side economy.

REFERENCES

1. Ivanov O.B., Bucwald E.M. National projects of Russia: Regional dimension. *ETAP: ekonomicheskaya teoriya, analiz, praktika = ETAP: Economic Theory, Analysis, and Practice*. 2019;(1):37–53. (In Russ.). DOI: 10.24411/2071–6435–2019–10067
2. Miroshnichenko M.A. Digital transformation: Russian priorities for creating a digital economy. Krasnodar: Kuban State University; 2021. 224 p. (In Russ.).
3. Yakimova M.N. Opportunities and limitations of project-based approach in the context of new public management implementation. *Ars Administrandi (Iskusstvo upravleniya) = Ars Administrandi (The Art of Management)*. 2015;(1):16–27. (In Russ.).
4. Komarova V.V., Nekrasova O.I., Zor'kina Yu.I. Project management. Khabarovsk: Far Eastern State Transport University; 2020. 158 p. (In Russ.).
5. Kozhevnikov S.A. Project management as a tool for enhancing the performance of government executive bodies. *Voprosy territorial'nogo razvitiya = Territorial Development Issues.* 2016;(5):2. (In Russ.).
6. Shpakova R.N. General targets for strategic development of Russian Federation regions. *Gosudarstvennoe upravlenie. Elektronnyi vestnik = Public Administration. E-Journal.* 2019;(77):311–336. (In Russ.). DOI: 10.24411/2070–1381–2019–10030
7. Andrianov V.D. National development goals of Russia up to 2030 and improvement of the strategic management system. *Rossiya: tendentsii i perspektivy razvitiya = Russia: trends and prospects for development.* 2021;16(2):17–29. (In Russ.).
8. Vanieva A.R., Zilyaev N.E. Management of socio-economic development of state entities based on a strategic planning system. In: Modern management and control: Trends and development prospects: Collection of scientific papers. Simferopol: IE Khoteeva L.V.; 2021:113–117. (In Russ.).
9. Minakir P.A., Prokapalo O.M. National projects in the Far East: Problems and prospects for development. *Regionalistika = Regionalistics*. 2021;8(1):39–55. (In Russ.). DOI: 10.14530/reg.2021.1.39
10. Markwart E., Trunova N.A. Spatial aspects of Campus-City interaction in the context of the national project "Science and Universities". *London Journal of Research in Humanities and Social Sciences*. 2023;23(3):41–47. URL: https://journalspress.com/LJRHSS_Volume23/Spatial-Aspects-of-Campus-City-Interaction-in-the-Context-of-the-National-Project-Science-and-Universities.pdf
11. Krupnov Y.A., Yankovskaya V.V., Semenova E.I., Semenov A.V. The institutional approach to the development of education in the social and investment model of Russia's economic growth. *Frontiers in Education.* 2023;8:1128574. DOI: 10.3389/feduc.2023.1128574
12. Ahmed D.A., Ibrahim M.A., Saeed Y.J. The role of information management systems in the implementation of the digital economy development strategy. *International Journal of Professional Business Review*. 2023;8(5): e01419.

13. Prokhorov A.P. Strategic formation of developing industries of the Russian Federation taking into account the digital transformation that defines a new model of economic development. *Nauchnyi zhurnal NIU ITMO. Seriya: Ekonomika i ekologicheskii menedzhment = Scientific Journal NRU ITMO. Series: Economics and Environmental Management.* 2023;(4):100–108. (In Russ.). DOI: 10.17586/2310–1172–2023–16–4–100–108
14. Prokhorov A.P., Prokhorova S.V. The role of Big Data technology in the transition from financial to management accounting in industrial enterprises. *Nauchnyi zhurnal NIU ITMO. Seriya: Ekonomika i ekologicheskii menedzhment = Scientific Journal NRU ITMO. Series: Economics and Environmental Management.* 2023;(1):34–42. (In Russ.). DOI: 10.17586/2310–1172–2023–16–1–34–42

ABOUT THE AUTHOR

Alexey P. Prokhorov — Lead Consultant, Department of Budget Planning, Government Programs and National Projects, Ministry of Economic Development of the Russian Federation, Moscow, Russia
https://orcid.org/0000-0001-7504-0363
alek.pro2014@gmail.com

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 10.02.2024; revised on 28.02.2024 and accepted for publication on 10.03.2024. The author read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-27-44
UDC 338.1(045)
JEL F5

Anti-Russian Sanctions Impact Areas

S.V. Kazantsev
Institute of Economics and Industrial Engineering,
Siberian Branch of the Russian Academy of Sciences,
Novosibirsk, Russia

ABSTRACT

Four processes occurring within the country and weakening contemporary Russian society are considered in this paper. These processes include: the reduction in income from foreign trade, the "brain drain", the depopulation and the capital outflow. Their qualitative and quantitative characteristics are presented; the internal and external factors that contribute to the development of these processes are identified. Numerous restrictions, prohibitions, and sanctions imposed on the Russian Federation aim to stimulate the development of these negative phenomena and expand the scale of their unwanted consequences on the Russian economy and society. The results of the author's research on the validity of Russia's adversaries' choice of the aforementioned processes as objects of sanctions impact on the Russian Federation are presented in this article.

Keywords: Russian Federation; foreign trade; emigration; demographic situation; capital movement; anti-Russian sanctions; adversary state

For citation: **Kazantsev S.V. Anti-Russian sanctions impact areas. *The World of New Economy*. 2024;18(1):27-44. DOI: 10.26794/2220-6469-2024-18-1-27-44**

INTRODUCTION

Influencing the economy of the Russian Federation, unfriendly states pursue the following goals [1, p. 24–34]:

- to weaken, slow down the development, destroy the economic system of the country.
- deprive Russia of the opportunity (or limit, impede) to obtain and use resources of socio-economic development;
- eliminate Russian economic entities from the world commodity markets, gain control over them and (or) acquire them as property, replace them with their own commodity producers;
- take possession of the country's wealth;
- turn the Russian Federation into a country dependent on them;
- protect their domestic markets and segments of the world market occupied by their own business entities from Russian competitors.

In choosing the means to achieve their goals, they, like any skillful attacker, study the weaknesses and vulnerable zones[1] of the enemy. For example, the U.S. has long been looking for unprotected and sensitive areas in the USSR economy.[2] This search continues with respect to the Russian Federation. A clear example is the report published in 2019 by the well-known American non-profit research organisation RAND Corporation[3] "How to Overstretch Russia: Competing from Advantageous Positions" [2], prepared for the US Department of Defence and its intelligence and analytical structures.

Examining the strengths and weaknesses of the Russian Federation's military, political, financial and economic power and demographics, U.S. researchers point to significant risks of military confrontation with the Russian Federation and note the weakness of the Russian economy.[4] The weaker a country's economy, the more difficult it is for it to maintain and develop its defence/military industrial complex (MIC). Consequently, the deterioration of the economy will weaken it over time. Therefore, in an effort to destroy the Russian economy, Russia's enemies are hoping to diminish its military potential as well.

The RAND Corporation in the above report noted that 'Russia's economic weaknesses are enormous, but the paradoxical result of the sanctions regime shows that weaknesses are not the same as vulnerabilities that the United States can exploit to its advantage' [2, p. 28] and named ten vulnerabilities of the modern Russian economy:

1) resource and raw material dependence;
2) drain of human capital;
3) reduction of the population, labour resources, number of persons of conscription age;
4) drain of financial capital;
5) inefficient management at different levels of society;
6) technological lag;
7) directing resources to wrongly chosen goals and objects, inappropriate and untimely use of resources;
8) pursuit of achieving and maintaining the status of a great power;
9) property inequality of the population;
10) poor protection from information influence.

The 2015 National Security Strategy of the Russian Federation named among the main strategic threats to Russia's national security in the field of economy[5]:

- preservation of the raw materials export model of development and high dependence on the foreign economic situation;
- lagging behind in the development and implementation of advanced technologies;
- unprotected national financial system from the actions of non-residents and speculative foreign capital.

Below we characterise the state of affairs in four of the ten above-mentioned areas of the Russian economy: foreign trade revenues, brain drain, population dynamics and capital flight from Russia. The

[1] Vulnerability of the object — (target) the degree of possible defeat of the object (target) when it is exposed to various enemy means. URL: https://dic.academic.ru/dic.nsf/emergency/3120/Уязвимость.

[2] URL: https://archive.org/details/NSC 201-USObjectivesWithRespectToRussia/NSC_20_1_book/

[3] Included by the Russian Ministry of Justice in the List of Foreign and International Non-Governmental Organisations whose activities are recognised as undesirable on the territory of the Russian Federation (No. 1618-o dated 06.12.2023).).

[4] Ibidem.

[5] URL: https://www.consultant.ru/document/cons_doc_LAW_191669/?ysclid=lucio834qz81581694

statistical basis of the study is the data of the Federal State Statistics Service of the Russian Federation (Rosstat) and the World Bank (World Bank).

DECREASE IN REVENUES FROM FOREIGN TRADE (FIRST OF ALL – TRADE IN RESOURCES)

"A country participating in international trade, first of all, develops its most competitive on foreign markets spheres of activity and expands imports of products, technologies and knowledge that are less favourable in domestic production. Thus, its economy and financial system naturally become dependent on the state of foreign trade. The more a country's economy depends on trade with other countries, the more painful it may be for it to reduce the scale of foreign trade and reduce budget revenues from exports and imports. This circumstance is used by external competitors, unfriendly and hostile states" [3, p. 896].

Internal factors weakening the position of the Russian Federation in global trade and the Russian economy include: exhaustion of natural resource reserves; high cost of extraction; reduced capacity and/or inability to extract, including: lack of necessary resources, technology and infrastructure; low cost-effectiveness or unprofitability.

The group of external factors includes: high delivery price and/or inability to deliver to external markets (e.g. due to difficulties and/or inability to make payments, obtain insurance, transport and storage problems); falling prices on world markets; reduced demand; sanctions, bans, restrictions; strong competitors.

The volumes of foreign trade of the Russian Federation and other countries of the modern world depend both on the level of their economic, scientific, technological and information development, and on the conditions of world markets. Changes in these spheres affect the volume, dynamics, geographical and nomenclature structure of foreign relations and foreign trade of the countries. In the context of a rapidly changing world and multidimensional changes in Russia, the last thirty-odd years have seen leaps and bounds in the volume and growth rates of Russia's foreign trade (*Table 1*).

Sharp drops in the volumes of Russian exports and imports in 1995–2021, as a rule occurred during financial and economic crises (in 1997–1998, the Russian Federation defaulted on State short-term obligations; in 2001, the dot-com crisis (doc.com); in 2009, the global financial and economic crisis that began a year earlier continued) and under the influence of insurmountable circumstances (in 2014–2016, the consequences of anti-Russian sanctions were felt; in 2019–2020, there was the COVID-19 pandemic). Before that, a strong contraction occurred in 1991–1992 (liquidation of the USSR): exports fell by 29.3%, imports fell by 13.0%.[6]

The linear correlation coefficient of growth rates of the total volume of exports and exports to non-CIS countries from the Russian Federation in 1995–2021 indicates a close relationship between these indicators: $R^2 = 0.9965$ (significance level $\alpha = 0.01$, i.e., the probability of error is 1%). The growth rates of the total volume of Russian imports and RF imports from non-CIS countries are also closely interrelated ($R^2 = 0.9834$, $\alpha = 0{,}01$). This, in particular, is indicated by the high level of stability of the share of exports to non-CIS countries and imports from these countries in the total volume of exports and imports of the Russian Federation respectively.

Indeed, in 1995–2021, the share of exports to non-CIS countries in the total volume of Russian exports varied from 77.7% (1995) to 87.8% (2018). Its arithmetic mean is 84.8% and the coefficient of variation is 2.8%. The share of imports from non-CIS countries in the total imports of the Russian Federation varied between 65.87% (2000) and 89.3% (2021). Its arithmetic mean is 81.8% and the coefficient of variation is 9.2%. The high share of the volume of trade turnover of the Russian Federation with non-CIS countries

[6] Data from the World Bank. URL: https://data.worldbank.org/indicator

Table 1

The average annual growth rates of exports and imports of the Russian Federation, 1995–2021, percent

Years	Export		Import	
	Total	To the far abroad*	Total	From the far abroad
1995–1996	116.0	118.7	109.6	106.1
1997–1998	91.5	91.2	96.9	100.6
1999–2000	120.2	124.5	88.2	83.1
2001	97.0	95.6	123.6	137.7
2002–2008	124.7	124.6	130.3	133.4
2009	64.5	64.0	62.7	63.1
2010–2013	114.9	115.4	117.2	117.4
2014–2016	81.6	81.8	83.3	83.8
2017–2018	125.6	126.3	114.4	114.2
2019–2020	86.5	85.5	98.6	98.8
2021	146.2	148.4	126.4	126.6
2022	119.9	Not available	88.3	Not available

Source: compiled by the author on the basis of Rosstats's data. URL: https://rosstat.gov.ru/statistics/vneshnyaya_torgovlya; Federal Customs Service of the Russian Federation. URL: https://statexim.ru/news/update2022part

* *Note:* in this paper, the far abroad countries are those that are not included in the CIS, in particular: the European Union, USA, China, India, Great Britain, Japan, the Middle East, Africa and the Americas, Mongolia, the Republic of Korea, Australia, New Zealand, Norway, Finland, the Baltic States, Ukraine, etc.

opens up an opportunity for unfriendly states[7] to influence the Russian Federation through restrictions, bans, prices, tariffs and sanctions in the sphere of foreign trade.

The strength of such impacts on Russia is limited by the low share of foreign trade in the gross domestic product (GDP) compared to other countries, the ability of the Russian Federation to change the geographical and commodity structure of foreign trade and to carry out import substitution.

The importance of foreign trade for the economy of the Russian Federation can be judged by its share in gross domestic product and federal budget revenues. Russia's share of foreign trade in GDP is lower than that of a number of states unfriendly to the Russian Federation (*Tables 2, 3*). From this point of view, the economy of the Russian Federation is less vulnerable than in countries where the share of foreign trade in GDP is higher than that of Russia.

[7] The Federal Law of 04.06.2018 No. 127-FL "On measures to influence (counteract) unfriendly actions of the United States of America and other foreign states" (latest edition) defines the concept of an unfriendly foreign state. URL: https://www.consultant.ru/document/cons_doc_LAW_299382/. Their list is contained in the Order of the Government of the Russian Federation dated 05.03.2022 No. 430-o (ed. 29.10.2022) "On Approval of the List of Foreign States and Territories Committing Unfriendly Acts against the Russian Federation, Russian Legal Entities and Individuals". URL: https://www.consultant.ru/document/cons_doc_LAW_411064/e8730c96430f0f246299a0cb7e5b27193f98fdaa/) and Order of the Government of the Russian Federation No. 3216-o dated 29.10.2022 "On Amendments to Order of the Government of the Russian Federation No. 430-o dated 05.03.2022". URL: https://www.consultant.ru/law/hotdocs/77714.html

Table 2

The average annual values of the share of Russian exports in GDP, 1995–2022, percent

Country/Years	1995–1998	1999–2000	2001–2008	2009–2015	2016–2017	2018–2022
Estonia	67.8	65.7	61.9	18.4	76.4	76.4
Lithuania	40.8	35.5	51.0	16.2	70.6	78.8
Latvia	38.5	35.9	38.7	13.3	60.6	63.0
Ukraine	43.8	57.0	57.0	11.0	48.7	40.3
Poland	23.6	25.6	34.0	10.1	51.2	55.7
Norway	38.2	42.0	42.9	9.4	36.3	40.9
Finland	36.8	39.8	40.9	8.7	36.2	39.7
RUSSIAN FEDERATION	27.8	43.6	34.0	27.7	26.0	28.6
USA	10.8	10.5	10.3	3.0	12.1	9.1
Japan	9.7	10.1	13.6	3.6	16.8	13.9

Source: the table is compiled by the author on the basis of data from the World Bank. URL: https://data.worldbank.org/indicator

Table 3

The average annual values of the share of Russian imports in GDP, 1995–2022, percent

Country/Years	1995–1998	1999–2000	2001–2008	2009–2015	2016–2017	2018–2022
Estonia	77.2	69.6	68.8	17.5	72.6	75.1
Lithuania	51.2	43.6	59.3	16.3	69.1	75.0
Latvia	47.2	44.8	53.1	14.1	60.7	65.0
Ukraine	46.5	51.8	48.4	12.1	56.1	47.6
Poland	25.6	31.8	37.3	10.2	48.2	52.5
Finland	29.4	30.7	34.9	8.8	36.8	40.5
Norway	32.1	29.9	27.6	6.7	32.8	31.1
RUSSIAN FEDERATION	23.7	25.1	22.6	20.5	20.7	19.7
USA	12.1	13.7	15.1	3.7	14.8	11.5
Japan	8.6	8.7	12.4	3.8	16.0	14.1

Source: the table is compiled by the author on the basis of data from the World Bank. URL: https://data.worldbank.org/indicator

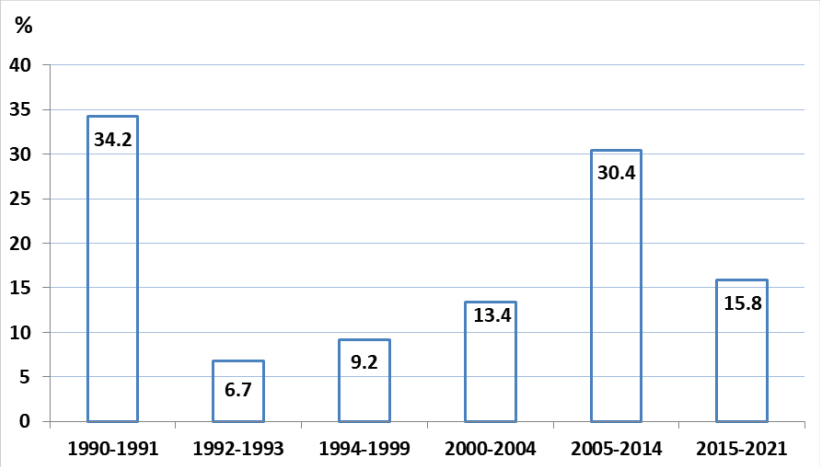

Fig. 1. **The average annual values of the share of foreign trade revenues* in the revenues of the consolidated budget of the Russian Federation, 1991–2021, percent**

Source: compiled by the author according to the data of the Ministry of Finance of the Russian Federation. URL: https://minfin.gov.ru/ru/statistics/fedbud/execute?id_57=80041-

* *Note:* receipts from foreign trade are calculated in this paper as the sum of taxes on goods imported into the territory of the Russian Federation, excise duties on excisable goods (products) imported into the territory of the Russian Federation, and income from foreign economic activity.

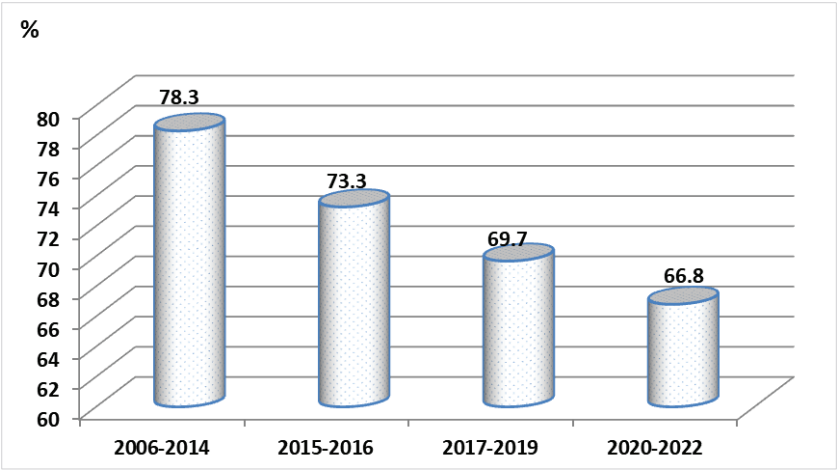

Fig. 2. **The average annual values of the share of income not related to domestic production in the revenues of the federal budget in the Russian Federation, 2006–2022, percent**

Source: compiled by the author according to the data of the Ministry of Finance of the Russian Federation. URL: https://minfin.gov.ru/ru/statistics/fedbud/execute?id_57=80041-

A less optimistic picture emerges when considering revenues from foreign economic activity[8] and the contribution of foreign trade to the budgetary system of the Russian Federation. After the liquidation of the USSR, the share of foreign trade revenues in the RF consolidated budget revenues increased, although it remained lower than in the last years of the USSR. It decreased only after the introduction of anti-Russian sanctions (*Fig. 1*).

[8] "Revenues from foreign economic activity are import and export customs duties, fees, payments, other receipts from foreign economic activity, special anti-dumping and countervailing duties, interest for untimely fulfilment (non-fulfilment) of countries' obligations to transfer amounts from the distribution of duties, offshore fees, as well as other fees and payments". URL: https://eec.eaeunion.org/upload/files/dep_stat/fin_stat/stat_tables/2021/finstat_2020.pdf

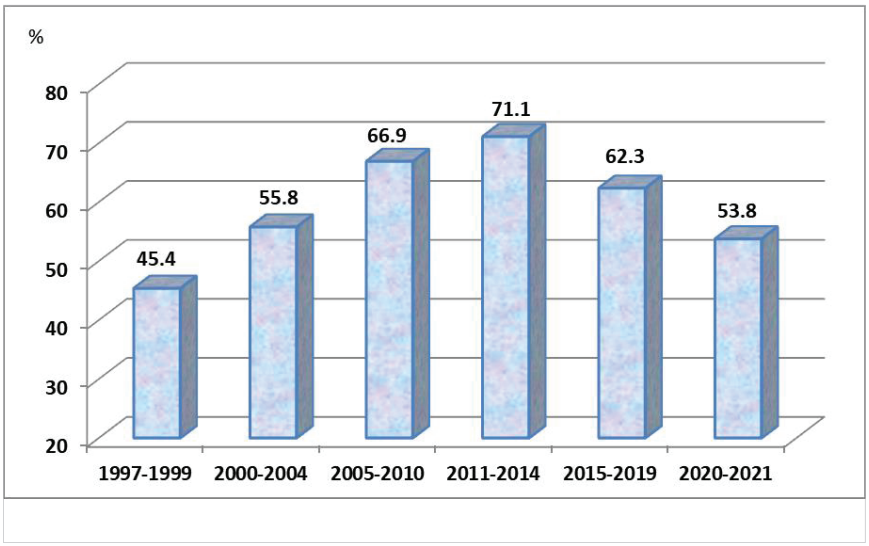

Fig. 3. **The average annual share of mineral products in the total volume of the Russian Federation exports, 1997–2021, percent**

Source: compiled by the author according to the data of the Ministry of Finance of the Russian Federation. URL: https://minfin.gov.ru/ru/statistics/fedbud/execute?id_57=80041-

The dependence of the RF federal budget revenues on non-domestic production revenues[9] is even higher (*Fig. 2*).

Unfriendly countries view the Russian Federation as a producer of raw materials, because the share of mineral products in the total volume of Russian exports is very high (*Fig. 3*). The share of crude oil, including natural gas condensate, and natural gas in the total volume of Russian exports in 2005–2013 ranged from 45.6% (2013) to 49.2% (2008). In 2014–2021, its annual average value was 37.1%.[10]

Therefore, it is not by chance that many anti-Russian sanctions are imposed precisely on the export of oil and a number of other natural resources from Russia. They are aimed not only at undermining the extractive industries, but also at reducing the revenues of the budget system of the Russian Federation.

The course on the export-raw material orientation of the economy, which has been implemented in modern Russia for many years, has contributed to the weakening of attention to the development of high-tech spheres of production and to the increase in the volume of imports of their products rather than advanced technologies. The average annual share of high-tech products in the total volume of Russia's imports in 2014–2016 was 64.3%, and in 2017–2021 it reached the level of 75.6%.[11] The institutions of the states that have been imposing restrictions, bans and sanctions on Russia since March 2014 have also taken this situation into account. They have included a wide range of high-tech products and bans on co-operation in many areas of activity relevant to their creation in the regularly updated and expanded sanctions lists.

"BRAIN DRAIN".

"Brain drain" is the emigration of a large number of specialists from different fields of activity.[12] Internal factors causing it include: low living standards compared to foreign countries; worse living and working conditions (in particular: na-

[9] Non-domestic production-related income = all income — domestic production-related income.

[10] Calculated by the author according to Rosstat data.

[11] Calculated by the author according to Rosstat data.

[12] URL: https://media.foxford.ru/articles/chem-otlichaetsya-ehmigraciya-ot-immigracii

Table 4

The average annual values of the ratio of the migration balance (arrivals minus departures) to the population of the country, 1989–2021, person/1000 persons

Country/Years	1989–1999	2000–2013	2014–2021
USA	6.3	4.0	3.6
Norway	1.9	6.0	4.6
RUSSIAN FEDERATION	2.9	2.1	2.3
Finland	1.3	2.1	3.0
Japan	0.3	1.0	1.2
Estonia	–7.6	–2.6	3.0
Poland	–1.0	0.1	–0.2
Ukraine	–0.8	–0.1	–0.7
Latvia	- 6.6	-7.5	- 5.2
Lithuania	–4.7	–9.4	–5.9

Source: the table is compiled by the author on the basis of data from United Nations Population Division Department of Economics and Social affairs. URL: https://population.un.org/wpp/Download/Standard/MostUsed/

ture, climate, danger of natural disasters, military actions); socio-economic inequality; political, religious, ethnic, etc. reasons.[13]

External factors include: luring young people and the most sought-after specialists abroad; better living and business conditions in other countries; obtaining the desired education abroad; spreading perceptions of a better life outside the Russian Federation [4, p. 194]. In Russian youth "such ideas are hardly supported by serious knowledge about the culture or political structure of Western countries and are probably superficial, but they are quite stable" [5, p. 7].

There are different estimates of the scale of emigration from the Russian Federation of scientists, specialists, cultural and sports figures. Thus, at the general meeting of the Russian Academy of Sciences (21–22 April 2021) the Chief Scientific Secretary of the Russian Academy of Sciences N.K. Dolgushin said that "the number of specialists going abroad annually has not decreased, and since 2012 this number from 14 thousand has increased to almost 70 thousand people at present".[14] Later it turned out "that the academician was referring to people with higher education".[15]

"According to the Chairman of the Siberian Branch of the Russian Academy of Sciences V.N. Parmon, "over the last five years our science has lost about 50 thousand scientists" [6, p. 1]. The Minister of Science and Higher Education of the Russian Federation V.N. Falkov reported that "in 2012 only 280 doctors and candidates of science left Russia", and that he "sees nothing wrong with migration".[16]

[13] URL: https://newizv.ru/news/2021–03–24/rektor-skolteha-aleksandr-kuleshov-strana-stanovitsya-starshe-bednee-i-glupee-323453

[14] URL: https://nauka.tass.ru/nauka/11198355

[15] URL: https://rg.ru/2023/06/06/s-umom-ostatsia-v-rossii.html

[16] URL: https://newizv.ru/news/society/27–08–2021/v-minobrnauki-ozabotilis-statistikoy-ob-utechke-mozgov-iz-rossii

Table 5

The average annual values of external migration growth in the Russian Federation, 1992–2022, thousand persons

Indicator/Years	1992–2000	2001–2006	2007–2020	2021	2022 (valuation)
Total	384.1	77.4	236.7	429.9	34.9
Including					
With neighbouring countries	N/A./ no data	91.6	233.6	401.2	51.4
With other countries	N/A./ no data	–26.2	3.1	28.7	–16.6

Source: the table is compiled by the author on the basis of data from "Migration balance (1992–2022)". URL: https://aftershock.news/?q=node/1227918&full: URL: https://aftershock.news/?q=node/1227918&full

Note: migration increase = number of arrivals from abroad minus number of departures from the country.

Minister of Digital Development, Communications and Mass Media of the Russian Federation M.I. Shadaev at the "government hour" in the State Duma of the Russian Federation on 20.12.2022 noted that "if we take two waves of departure of IT-specialists, up to 10% of employees of IT-companies left the country and never returned. If we take in total, about 100 thousand IT-specialists are outside our country".[17] At the same time, he noted that "80 per cent of those who left continue to work for Russian companies".[18]

In general, the Russian Federation is among the countries with a positive migration balance (arrivals minus departures). However, a number of unfriendly countries bordering Russia have more migrants leaving than coming in (*Table 4*).

The main issue is who is leaving and who is coming. The shortage of highly qualified specialists in today's high-tech world, where states and economic entities fight for technological superiority, leadership, and dominance, hinders the country's development. Therefore, government agencies and private companies in many countries of the world are actively recruiting professionals, creating more comfortable conditions for them than in their home countries, including in Russia.[19]

Emigration of professional personnel reduces, first of all, the opportunities for scientific, technological, cultural and educational development of the country they leave. In the long term, this affects the ethnic composition of society, the ratio of confessions and worldviews, the crime situation and, ultimately, the important security factor — the unity of society.

"All this is clearly manifested when highly qualified, enterprising, creative individuals leave the country (for example, such as one of the creators of the social network "VKontakte" and the company of the same name, cross-platform messenger Telegram — P.V. Durov; the founder and honorary president of the company "Vympel-Communications", a scientist-radio technician, philanthropist, founder of the "Dynasty" Foundation, co-founder of the "Enlightener" award — D.B. Zimin), but un-

[17] URL: https://www.interfax.ru/russia/877771

[18] Ibidem.

[19] For example, in the IT sector, Kommersant newspaper sources "speak about the expressed desire of about 5,000 specialists to leave. They are considering Cyprus, Georgia, Turkey, Lithuania, and the USA for relocation. According to Kommersant, some companies themselves take entire teams abroad. According to the latest estimate of the Ministry of Finance, the shortage of personnel in the IT industry in Russia already ranges from 500 thousand to 1 million people, and by 2027 it may increase to 2 million specialists". URL: https://www.kommersant.ru/doc/5237954

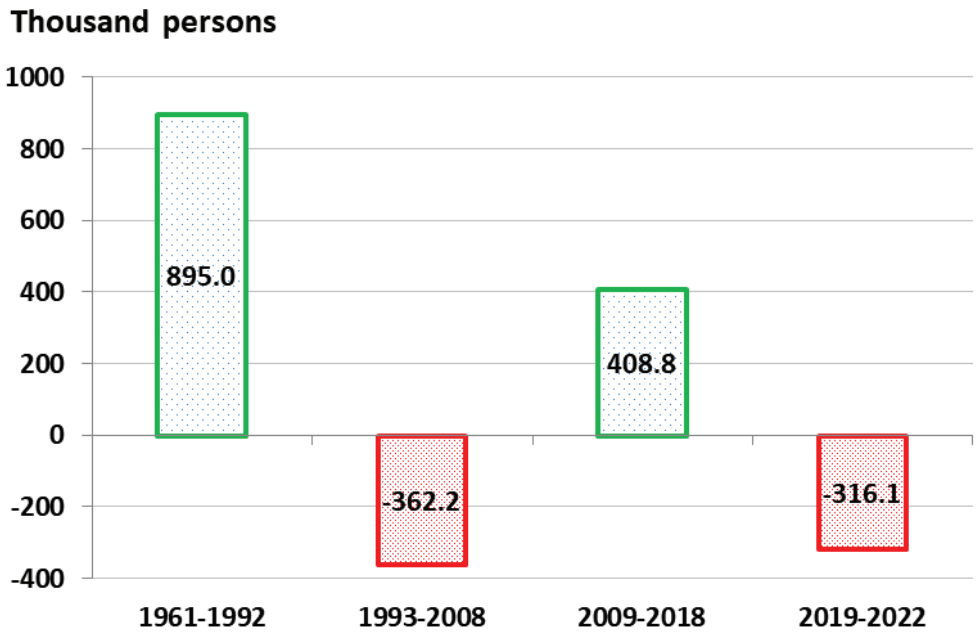

Fig. 4. **Average annual changes in the population of the Russian Federation during the periods under consideration in 1961–2023 ("+" — growth, "–" — decrease), thousand people**

Source: compiled by the author on the basis of data from the World Bank, Rosstats's data. URL: https://data.worldbank.org/indicator; https://gogov.ru/articles/population-ru

Note: Since 2014, taking into account the population of the Republic of Crimea and the city of Sevastopol.

educated people with alien to the natives norms of behaviour, notions of justice and law, as well as with a different ideology, come here.

"When a certain "critical number" of the latter is formed, the crime rate increases,[20] the disunity of society, non-affection and confrontation of separate social groups arise and intensify" [7, p. 65–66].

Since 1992, the balance of external migration (arrivals minus departures) to the Russian Federation is formed mainly by those arriving from the former republics of the USSR (*Table 5*).

Over the last "30 years, the main "suppliers" of migrants to Russia have been Ukraine and Kazakhstan, and in the last 3–4 years Tajikistan has been added to them. …The migrant leaders of the last decade also include Armenia, Kyrgyzstan and Uzbekistan, from where, until the mid-1990s, a large number of citizens of predominantly Russian origin came to Russia".[21] At the same time, "more often skilled workers from Central Asian republics come to Russia, and among them only 13–17% have higher education. While in Russia there is "intellectual migration" — 70 per cent of those leaving have higher education".[22]

The Chairman of the Supervisory Board of the Autonomous Non-profit Organization "Institute of Demography, Migration and Regional Development", laureate of the President of the Russian Federation Prize in the field of education, 3rd class able State Counsellor of the Russian Federation Yu. V. Krupnov notes that "annually 5–10% of migrants entering the Russian Federation stay on our territory and naturalise, legalise" and that "there is an ethno-demographic replacement of the indigenous population in the Russian Federation".[23]

[20] At a meeting of the State Duma on 17 January 2023, Deputy Minister of Internal Affairs of the Russian Federation, retired police colonel general I. N. Zubov said: "At the end of 2022, 40,200 crimes were committed by foreigners, which is 10.3% more than last year." "Zubov emphasised that they accounted for 3.9% of the total number of crimes committed in the Russian Federation during the year". URL: https://tass.ru/obschestvo/16874075

[21] URL: https://aftershock.news/?q=node/1227918&full

[22] URL: https://newizv.ru/news/2021–08–27/v-minobrnauki-ozabotilis-statistikoy-ob-utechke-mozgov-iz-rossii-336699

[23] URL: https://dzen.ru/a/Yya0wgtPry-lX1oZ

Table 6

Increase (+) / decrease (–) in the population of countries bordering the Russian Federation, 1991–2022, mln persons

Country	Increase	Country	Decrease
China	277.0	Estonia	–0.2
USA	83.7	Poland	–0.5
DPRK (North Korea)	5.3	Latvia	–0.8
Kazakhstan	3.3	Lithuania	–0.9
Azerbaijan	3.0	Belarus	–1.0
Japan	1.6	Georgia	–1.1
Mongolia	1.2	RUSSIAN FEDERATION	–1.3
Norway	1.2	Ukraine	–13.9
Finland	0.6		

Source: compiled by the author on the basis of data from the World Bank, Rosstats's data. URL: https://data.worldbank.org/indicator; https://gogov.ru/articles/population-ru

REDUCTION OF POPULATION, PERSONS OF CONSCRIPTION AGE, LABOUR RESOURCES

Population preservation, health and well-being of people is the first of the goals named in the Decree of the President of the Russian Federation No. 474 dated 21.08.2020 "On the National Development Goals of the Russian Federation for the period until 2030".[24]

Internal factors that lead to a decrease in the number of the society include: negative socio-demographic, economic and political processes within the country; military actions on the territory of the country or their threat; family circumstances.

External factors include: high attractiveness of foreign countries in terms of living standards, labour conditions, access to information and technology; policies of other countries to attract personnel; information policy and propaganda; dissemination of ideas from abroad about a better life outside the Russian Federation; wars, epidemics and natural disasters.

In 1961–1992, the average annual population of the Russian Federation increased annually, while in 1993–2008 it decreased. In 2009–2017, the growth of the average annual number of Russian citizens resumed, and from 2018 the decline began again (*Fig. 4*).

The Unified Plan for Achieving the National Development Goals of the Russian Federation for the Period until 2024 as well as the Planning Period until 2030 notes that "due to objective demographic trends, the population of the Russian Federation will decline in the next few years".[25]

In terms of population dynamics, the Russian Federation looks weaker than a number of countries bordering it by land and sea (*Table 6*).

The danger of depopulation in general is supplemented by the uneven distribution of inhabitants in the country, concentration of population in a small number of administrative-territorial formations and depopulation of most territories.

EXPORTATION OF CAPITAL

In this paper, the author uses the terms "capital inflow into the country", "capital influx", "capital

[24] URL: http://www.kremlin.ru/acts/bank/45726

[25] URL: https://www.economy.gov.ru/material/file/ffccd6ed40dbd803eedd11bc8c9f7571/Plan_po_dostizheniyu_nacionalnyh_celey_razvitiya_do_2024g.pdf

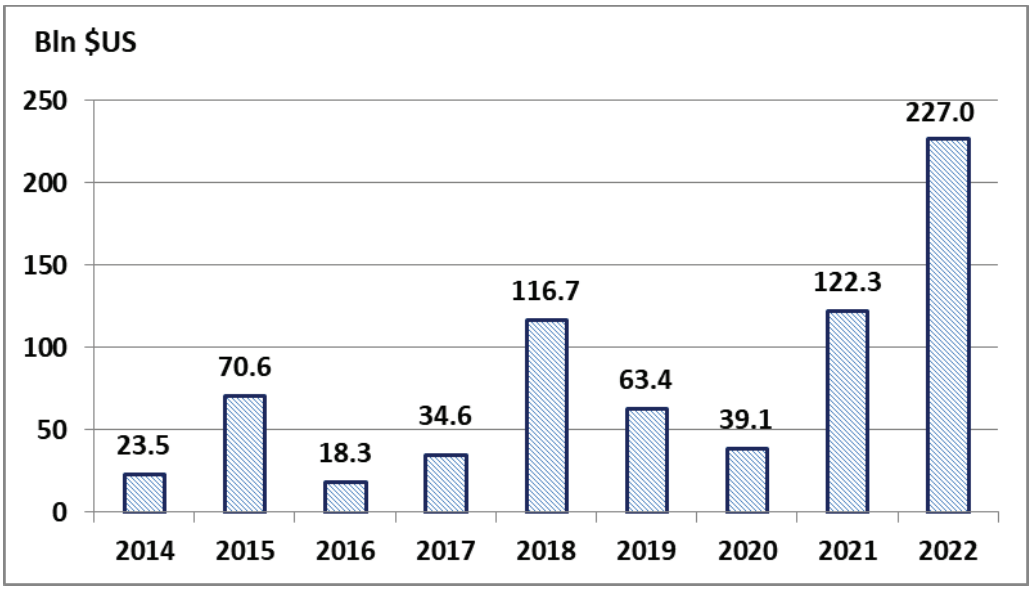

Fig. 5. **The balance of the financial account of the Russian Federation, 2014–2022, bln $USD**

Source: the figure is constructed by the author on the basis of data from the Central Bank of the Russian Federation and the Center for Macroeconomic Analysis and Short-term Forecasting. URL: http://global-finances.ru; http://www.forecast.ru/_ARCHIVE/Mon_13/2023/TT2023_8.pdf

exportation", "capital outflow from the country", and financial account balance. The latter is the difference between the export of capital from the country and the inflow of capital into the country.[26] Positive value of the financial account balance, as it is known, has a negative impact on the state and development of the economy of the country, and its negative value has a positive impact on the economy.

The term "capital outflow" is not used in the paper. It means, as E.S. Nabiulina, Chairman of the Central Bank of the Russian Federation, said, "withdrawal of money on dubious, suspicious grounds".[27]

Both internal and external factors influence the export of capital from the country. Domestic factors include: less favourable than abroad conditions (economic, regulatory, scientific and technological, logistical, natural and climatic) for staying in the country and conducting business activities, unsatisfactory state of infrastructure.

Experts attribute the flight of capital from the country to "a poor investment climate, an integral part of which is the corruption of the judicial and executive authorities".[28] As for infrastructure, as N.V. Zubarevich, director of the regional programme of the Independent Institute for Social Policy, points out, "the deterioration of infrastructure has long been a reality. Nowadays, funds are allocated only for patching holes, not for commissioning new facilities. But it is impossible to exploit old things indefinitely. In descending order, the most vulnerable places in Russia now are the road network, deterioration of buildings and structures, energy networks and infrastructure".[29]

External factors include: favourable conditions for capital application in offshore countries; developed technological base and logistics in foreign countries; bans, restrictions and sanctions imposed on activities in the Russian Federation and on work with business entities located in the Russian Federation.

[26] URL: https://cbr.ru/statistics/macro_itm/svs/meth_com_bop/

[27] URL: https://www.alta.ru/external_news/99775/

[28] URL: https://www.forbes.ru/sobytiya-slideshow/vlast/77637–11-glavnyh-ugroz-2012-goda-novyi-reiting-forbes

[29] Ibidem.

As a result of the combination of factors, more capital left the Russian Federation in 2014–2022 than entered (*Fig. 5*), which reduced the country's development potential, and the activities of foreign companies were more active outside than inside Russia.

The ratio of the financial account balance to the gross domestic product (GDP) during the period under consideration in the Russian Federation was between 1.1% (2014) and 10.5% (2022). From this we can conclude (leaving aside the issue of the areas of activity from which capital leaves) that in terms of scale the role of capital exports from Russia for the economy is not so significant.

Let us consider an important component of capital inflow and export for the development of domestic production — foreign direct investment. "Direct investment is a category of cross-border investment in which a resident of one country exercises control (more than 50% of votes in management) or has a significant degree of influence (from 10 to 50%) on the management of an enterprise that is a resident of another country".[30]

Before the anti-Russian sanctions imposed by a group of states in March 2014, both inbound and outbound foreign investment in the Russian Federation was increasing; after the sanctions were imposed, it has been decreasing (*Fig. 6*).

At the same time, the average annual volumes of net direct investments in the Russian Federation (incoming minus outgoing) in 1992–2022 were negative during the global crisis of 2000–2003[31] and since the global financial and economic crisis of 2008–2010. (*Fig. 7*).

Judging by the ratio of inbound and outbound foreign direct investment in Russia (*Table 7*), the role of its scale in the country's economic development was not high.

In 2008–2022, the average annual ratio of foreign direct investment balance (outflow from the country minus inflow to the country) to GDP in the Russian Federation was lower than, for example, in Norway and Japan. (*Fig. 8*).

It should be noted that the importance for the Russian economy of the spheres of activity in which investments flowed in and out of requires a special study and is not considered in this paper. As for the composition, investments in fixed capital are a significant resource for development. After the introduction of anti-Russian sanctions in March 2014, their volumes in the Russian Federation decreased and after adapting to the changed economic conditions began to recover (*Fig. 9*).

The decrease in the growth rates of investments in fixed assets in the Russian Federation in 2008–2013 is associated with the global financial and economic crisis, the crisis of 2008–2010 and the recession of 2012–2013.

It should be noted that the largest share in the growth in fixed capital was made up of investments in the Russian form of ownership. At the same time, in 2014–2016, the share of investments in joint (Russian and foreign) ownership increased significantly. In the average annual growth in fixed capital, the share of Russian-owned investments in 2014–2016 fell to 54.8%, after which it quickly recovered. (*Table 8*).

The improvement of the investment climate and the situation with capital outflow from the Russian Federation will be facilitated, first of all, by eliminating internal causes of capital flight from the Russian Federation and expanding co-operation with non-hostile states and economic entities in foreign jurisdictions interested in joint activities.

CONCLUSIONS

These weaknesses have been present in the economy of the Russian Federation for decades. For example, the USSR's oil and gas dependence was fully utilised by Ronald Wilson Reagan (40th President of the USA (1981–1989) to fight the Soviet Union (the so-called "President Reagan's Secret Plan"). In the National Security Strategy of the Russian Federation until 2020, adopted in 2009, the main strategic risks and threats to the national security

[30] Finances of Russia. 2022. Statistical Collection. Moscow: Rosstat; 2022. 392 p.

[31] Thus, according to the World Bank, in 2003 alone, $ 1.795bn more went out of the Russian Federation than came in. URL: http://data.worldbank.org/

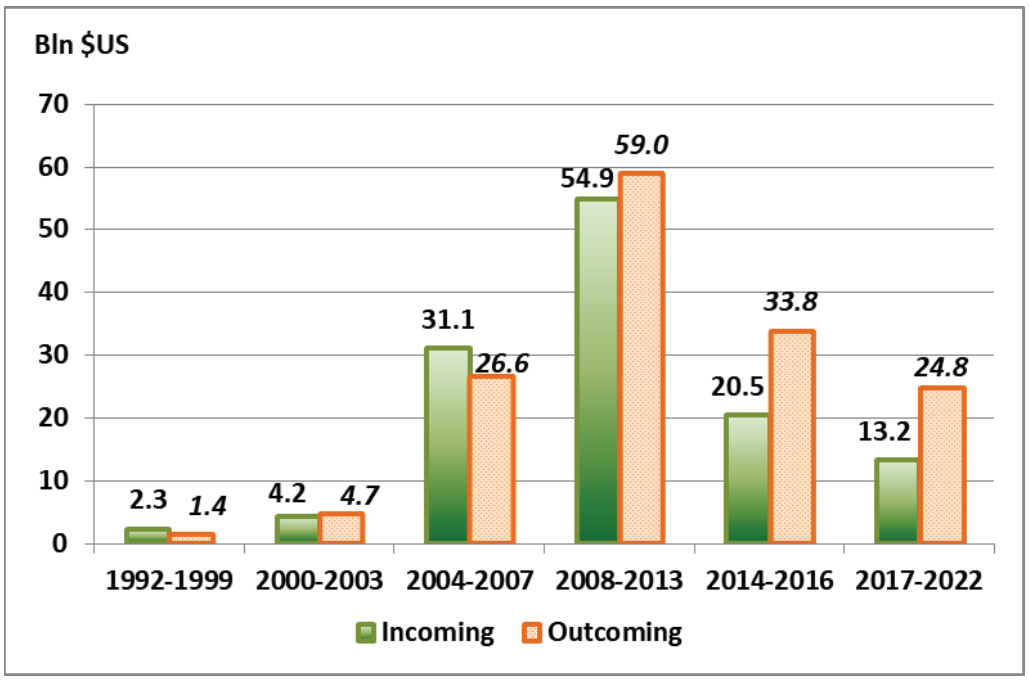

Fig. 6. **The average annual volumes of direct investments flowing into and out of the Russian Federation, 1992–2022, bln $USD current prices**

Source: compiled by the author on the basis of data from the World Bank. URL: http://data.worldbank.org

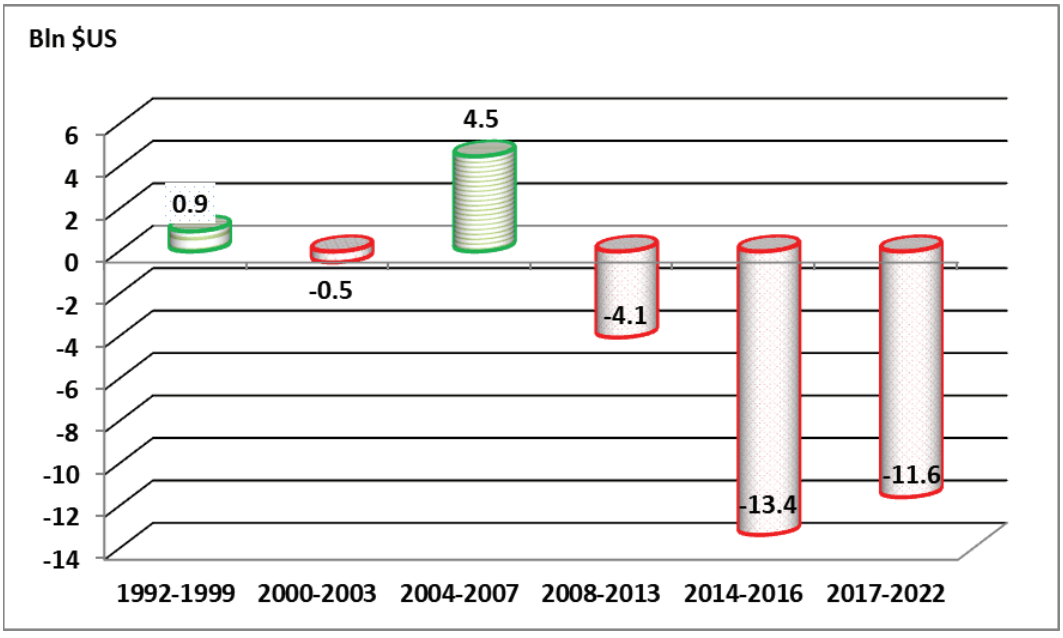

Fig. 7. **The average annual net volumes (incoming minus outgoing) of direct investments in the Russian Federation, 1992–2022, bln current $USD**

Source: compiled by the author on the basis of data from the World Bank. URL: http://data.worldbank.org/indicators

Table 7

The ratio of the average annual volumes of foreign direct investment flows into and out of the Russian Federation to the average annual GDP of the Russian Federation, 1992–2022, percent

Investments	1992–1999	2000–2003	2004–2008	2008–2013	2014–2016	2017–2022
Inbound	0.63	1.26	3.41	3.01	1.31	0.73
Outbound	0.37	1.41	2.92	3.23	2.16	1.41

Source: compiled by the author on the basis of data from the World Bank. URL: http://data.worldbank.org/indicators

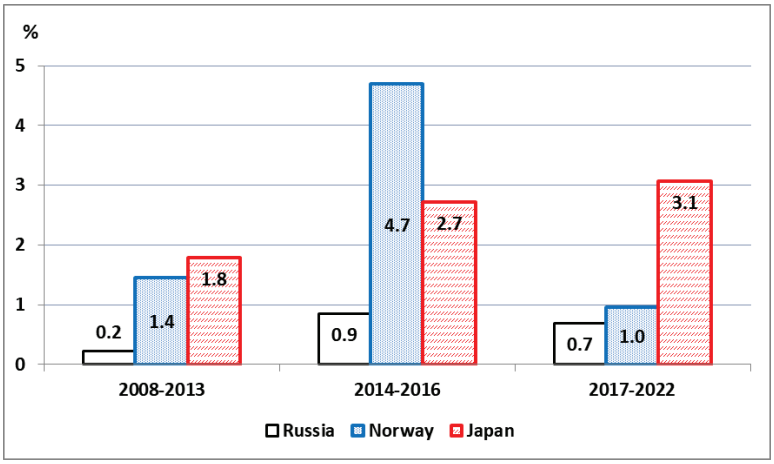

Fig. 8. **The average annual ratio of the balance of foreign direct investment (departure from the country minus arrival in the country) to GDP, percent**

Source: compiled by the author on the basis of data from the World Bank. URL: http://data.worldbank.org/indicators

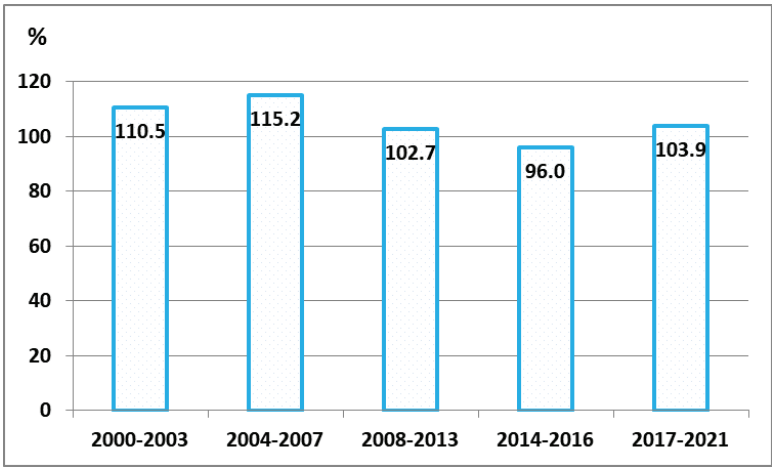

Fig. 9. **The average annual rates of growth of investments in fixed assets in the Russian Federation in 2000–2022 at comparable prices, percent**

Source: compiled by the author on the basis of Rosstats's data from "Russian Statistical Yearbook" for a number of years.

Table 8

The average annual shares of investments in fixed assets by various forms of ownership in relation to the total volume of average annual investments in fixed assets in the Russian Federation during the periods under review, 2001–2022, percent

Form of ownership	2001–2003	2004–2007	2008–2013	2014–2016	2017–2022
Russian	81.5	82.6	88.5	54.8	88.3
Foreign	7.0	8.6	8.3	4.6	3.0
Joint Russian and foreign	11.5	8.8	3.2	40.6	8.7

Source: compiled by the author on the basis of Rosstats's data from "Russian Statistical Yearbook" for a number of years.

of the Russian Federation in the economic sphere in the long term are "preservation of the raw materials export model of the national economy development, reduction of competitiveness and high dependence of its most important spheres on the foreign economic situation, loss of control over national resources, deterioration of the raw material base of industry and energy, uneven development of the regions and progressive labour insufficiency, low stability and security of the national financial system, preservation of conditions for corruption and criminalisation of economic and financial relations, as well as illegal migration".[32]

Knowing the long-standing export-raw material orientation of the Russian Federation's economy, unfriendly states have hit both Russian exports and imports. In order to deprive the Russian Federation of export revenues, its enemies have imposed bans on imports from the Russian Federation and on transfers of the main Russian export commodities: products of extractive industries (crude oil, coal, gold, fish and seafood), liquefied natural gas, oil products, ferrous and non-ferrous metals, a large group of high-margin goods (caviar, Portland cement, alumina cement, slag cement, super sulphate cement and similar hydraulic cements, mineral fertilisers, timber and wood products, ships and tugboats, alcoholic beverages, etc.). These bans are aimed not only at undermining industries, but also at reducing the revenues of the budgetary system of the Russian Federation.

Restrictive measures on imports from the Russian Federation also include the imposition of increased customs duties and price ceilings.

The export-raw material orientation of the Russian economy has naturally (due to the law of comparative advantage formulated by David Riccardo) led to a weakening of attention to the development of industries whose products turned out to be uncompetitive and marginally competitive in foreign markets. In many respects, this affected high-tech modern capital-intensive industries operating on advanced knowledge-intensive technologies. Domestic and foreign entrepreneurs began to supply goods of such spheres of activity to Russia from abroad, as well as to produce them at foreign-owned enterprises opened in the Russian Federation.

This "weakness" is affected by bans on exports to the Russian Federation of a wide range of goods, technologies, software products, and telecommunications equipment,[33] as well as the withdrawal of foreign firms from the Russian market. Export bans and restrictions on exports to the Russian Federation are aimed at curbing the development of both extractive industries (primarily oil production) and the means of delivery of their products, as well as production, mainly in high-tech and logical spheres

[32] URL: http://www.kremlin.ru/supplement/424

[33] In addition to those prohibited for export, there are other lists of goods that require a licence to supply to the Russian Federation.

of activity (aviation, space, electronic and information industry, communications, software). And bans on exports to Russia of household and luxury goods, alcohol, sports, and other consumer goods[34] are designed to reduce the standard of living of Russian citizens with all the ensuing consequences.

One of them may be the formation of an idea of a better life abroad, causing a desire to leave Russia. The emigration of highly qualified specialists from various spheres of social life: science, culture, education, art, informatics, etc. poses a serious threat to Russia's socio-economic, scientific, technological, cultural, and educational development. RAND Corporation experts consider the outflow of human capital to be the biggest problem for Russia in the long term. To solve the problem of "brain drain" it is important to make it so that high-class professionals from various fields of activity and talented entrepreneurs, having gone abroad, lived, studied, trained, and worked there, would finally return to Russia.

A serious danger for the Russian Federation in the short and long term is the reduction of the country's population. At the same time, the number of citizens of neighbouring states (some of them dominated by religions different from Russia) and strategic adversaries of the Russian Federation is rapidly growing. And V.T. Tretyakov is right when he argues that the increase in the number of Russians should be put "at the head of all economic, social, political and other strategies and programmes", and "the strategy of multiplying the people is the key to answering all other threats and challenges facing Russia" [8].

The dynamics and scale of capital inflows into and outflows from a country are largely determined by the state of the world economy and foreign policy factors. In today's fast-changing world and with periodic global financial and economic crises, the dynamics of the balance of incoming and outgoing capital is naturally oscillating. This, in particular, is illustrated by *Fig. 5*. Therefore, for sustainable economic development, the main emphasis, as it seems, should be placed on internal sources of capital increase and on domestic investments.

I believe that the work to eliminate weaknesses in the Russian economy should not rely solely on the action of market mechanisms. Under capitalism, economic entities are primarily interested in profit and gain. Thus, in conditions of limited demand, low ability of the population to pay, high costs for the creation of modern technologies and means of production inside the country, it is more profitable for entrepreneurs working in it to sell goods created abroad and buy everything necessary for production there, to attract cheap labour from abroad.

From the business point of view, this is logical, because, on the one hand, limited domestic demand does not allow increasing production volumes, the growth of which reduces the cost per unit of output. Small production volumes result in a high cost per unit of goods, and this raises its price. The high price further reduces the already low payment-capable demand. Increased demand for domestic goods in foreign markets allows to expand production volumes and thereby reduce the unit cost of the product and at the same time provides an attractive level of market prices.

On the other hand, numerous offers of production means by foreign producers and lower prices from foreign sellers encourage domestic businessmen to buy abroad rather than in their own country, where production means, especially the newest ones, are either not available or are more expensive than imported ones.

The current ratio of supply and demand, prices, production volumes and quality of goods in the Russian Federation and on world markets are such that it is more profitable for Russian producers to export their goods. At the same time, it is more profitable for Russian business to import than to create or purchase domestic products (especially in the context of technological backwardness in a number of areas). This, in particular, explains why, in the conditions of sanctions pressure on the Russian Federation, domestic business pays more attention to finding and building new logistics chains rather than replacing foreign goods with domestic ones. As they say: "it's

[34] Specifically, the U.S. imposed a ban on exports and re-exports to Russia of swimming costumes and accessories for boys and girls.

just business so don't take it personally". One of the consequences of such behaviour is the weakening of the national currency.

At the same time, states unfriendly to Russia have put politics before economics: the bans, restrictions, and sanctions they impose are harmful to their business. Thus, the countries of developed capitalism prove in practice that there are goals that are more important than profit, and they strive to achieve them. It is not excluded, of course, that after eliminating Russia as a competitor in the world markets and geopolitical arena, they expect to compensate for the lost profits in the long run.

I believe that a country in a hostile environment should not rely on outside help — foreign countries will not help. It is necessary to build up internal resources by all means. The less they are used and the slower they increase, the stronger the influence of external factors on the socio-economic, political, scientific-technological, cultural-educational, and informational development of the country seems to be. In conditions of external isolation, both methods of motivation of economic entities and methods of coercion are applicable for building up strength and power (even under private ownership of the means of production).

ACKNOWLEDGEMENTS

The article was prepared according to the research and development plan of Institute of Economics and Industrial Engineering of the Siberian Branch of the Russian Academy of Sciences for 2024, project 5.6.6.4 (0260-2021-0008). "Methods and models of justification of the strategy of development of the Russian economy in the conditions of changing macroeconomic reality".

REFERENCES

1. Kazantsev S.V. Global economic aggression. Novosibirsk: Ofset-TM; 2019. 100 p. (In Russ.).
2. Dobbins J., Cohen R.S., Chandler N., et al. Extending Russia: Competing from advantageous ground. Santa Monica, CA: RAND Corporation; 2019. 354 p.
3. Kazantsev S.V. Relative assessment of the sensitivity of the Russian economy to restrictions on its foreign trade. *Ekonomicheskaya bezopasnost' = Economic Security*. 2023;6(3):865–876. (In Russ.). DOI: 10.18334/ecsec.6.3.118630
4. Markov B.V. Culture of everyday life. St. Petersburg: Piter; 2008. 352 p. (In Russ.).
5. Volkov D. Youth. Vedomosti. 2018;(229):7. (In Russ.).
6. Medvedev Yu. Scientists want to go to the base. Rossiiskaya gazeta = Russian newspaper. 2023;(145):1;9. (In Russ.).
7. Kazantsev S.V. Population, monetary income and national security of the Russian Federation and its regions. *Region: ekonomika i sotsiologiya = Region: Economics and Sociology*. 2022;(3):61–80. (In Russ.). DOI: 10.15372/REG20220303
8. Tretyakov V. Spineless Russia. INTELROS. URL: http://intelros.org/lib/statyi/tretyakov1.htm (In Russ.).

ABOUT THE AUTHOR

Sergey V. Kazantsev — Doctor Sci. (Economics), Chief Researcher of the Institute of Economics and Industrial Engineering, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia
http://orcid.org/0000-0003-4777-8840
kzn-sv@yandex.ru

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 17.11.2023; revised on 11.12.2023 and accepted for publication on 25.12.2023. The author read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-45-57
UDC 334.024(045)
JEL M14

Prospects for Sustainable Corporate Governance in Russia Based on Integrated Communications

A.V. Lopukhin[a], E.A. Plaksenkov[b], S.N. Silvestrov[c]
[a] Independent researcher, expert, Moscow, Russia;
[b] Moscow School of Management SKOLKOVO, Moscow, Russia;
[c] Financial University, Moscow, Russia

ABSTRACT

The article presents the author's understanding of the terms "corporate governance", "corporate management" and "communication management" in the context of the concept of sustainable development, the ESG agenda and sustainable corporate governance, as well as their relationship. The role of the stakeholder approach in bringing together the content of the concepts of "corporate governance" and "integrated communications" is shown. Some features of communications management in Russia, including in the context of ESG, are examined in detail. **The relevance** of the study is due to the fact that many Russian companies and organizations are extremely slow to implement the principles and methods of integrated communications and sustainable corporate governance, although they determine the effectiveness of their activities. **The subject of the study** is the system of sustainable corporate governance as part of the implementation of ESG principles in Russia. **The purpose** of the article is to show Russian stakeholders the role of integrated communications in the development of sustainable corporate governance and ESG policies using research methods such as analysis of scientific papers on the research topic, comparison, generalization, systemic and logical analysis. **The scientific novelty** of the publication is justified by the author's interpretation of the variants of understanding the terms, for example, the authors of the article consider the organizational and/or functional division of communications into internal and external to be unproductive. In addition, in order to modernize the methodology for rating and auditing companies and organizations for compliance of their activities with ESG principles, the authors propose to increase the number of management criteria of block "G", using metrics for assessing the effectiveness of integrated communications management, taken from the "corporate management" and "communications" systems management». **The practical significance** of the work lies in the possibility of its use in the development of integrated communications systems within the framework of sustainable corporate governance, as well as in the course of modernizing the methodology for rating and auditing ESG policies in Russian companies and organizations. **A further direction of research** may be related to the development of criteria and indicators of the quality of integrated communications systems and sustainable corporate governance, as well as consideration of the characteristics of Russian communications practices in the business environment.

Keywords: corporate governance; corporate management; communication management; integrated communications; stakeholder approach to communication; sustainable development; sustainable corporate governance; ESG policy

For citation: **Lopukhin A.V., Plaksenkov E.A., Silvestrov S.N. Prospects for sustainable corporate governance in Russia based on integrated communications. *The World of New Economy*. 2024;18(1):45-57. DOI: 10.26794/2220-6469-2024-18-1-45-57**

INTRODUCTION

The shortest definition of corporate governance (CG) found by authors in the extensive literature on this topic is that "Corporate governance is about the control of the resources in firms". At the same time, American professor of economics Kang H. Park emphasises that "the system of corporate governance determines who makes investment decisions in corporations, what types of investments are made and how the income received from them is distributed <...> The importance of corporate governance is due not only to the fact that it determines who controls the firm, but also to the fact that corporate values are created in the process of corporate governance. There have been many studies, showing that corporate governance affects the market value of firms" [1, p. 1].

The term "Corporate Governance", which has been practised for centuries, is believed to have been introduced to academia in 1984 by Robert Tricker, who emphasised that the role of corporate governance "is not concerned with the management of the business per se, but with the overall management of the enterprise..." [2, p. 6].

The 1992 report of the UK Committee on the Financial Aspects of Corporate Governance, chaired by Sir Adrian Cadbury, defined corporate governance as "the system of management and control of companies".[1]

There are more than 60 definitions of Corporate Governance in scientific and management literature, and its generally accepted principles and standards are constantly being updated. According to the observation of the authors of this article, who have experience of working as independent directors on boards of directors (BoD) and executive directors of several companies and organisations, corporate governance in practice is regarded as the activities of owners (shareholders) and managers in order to improve efficiency and ensure sustainable development of companies and organisations.

The corporate governance process is based on principles, rules, procedures and ethical standards of behaviour and decision-making. Based on best practices, principles and standards of good corporate governance have been developed and international and national corporate governance codes (Codes of Corporate Governance) have been adopted. The 2002 Russian Code of Corporate Behaviour and the 2014 Corporate Governance Code were developed with the participation of foreign consultants and contain many provisions borrowed from international and Anglo-Saxon codes.

When translating foreign concepts or standards into Russian, a problem often arises. This applies to the concept of "governance", which is now unambiguously translated as "managing", as well as the term "management" itself. But there were other variants: leadership, regulation, general management, political management, etc.

The first Russian Corporate Governance Code of 2002 was called "Code of Corporate Behaviour", and this interpretation had its reasons. The World Bank experts noted in 1994 that "governance" in practice is very close to the concept of "leadership", but this interpretation was not widespread at that time.[2]

Note that the term "management" is translated into Russian not only as "governance" or "managing", but also as administration, administering, directing, ruling, ability to cope and manage, etc.

The Information Systems Audit and Control Association (ISACA), which operates in almost all countries of the world, translated the terms "governance" and "management" into Russian as "leadership" and "managing" as a result of a multilateral discussion to make the text easier to understand and to more accurately convey the essence of both concepts.

The translation options were widely and openly discussed, taking into account established authorised terms and accepted standards.

[1] URL: http://www.blindtiger.co.uk/IIA/uploads/2c9103-ea9f7e9fbe-7e3a/Cadbury.pdf

[2] URL: https://documents1.worldbank.org/curated/en/711471468765285964/pdf/multi0page.pdf

In ISACA's understanding, **leadership** provides assurance that the enterprise's objectives will be achieved by: balancing stakeholder needs with existing conditions and feasible options; prioritising decision-making; and continuously monitoring actual performance and the extent to which the established objectives are being accomplished.

While **managing** is about planning, constructing, executing, and monitoring activities according to the direction given by the management body to achieve the objectives of the enterprise.[3]

In some cases, the terms "corporate governance" and "corporate management" are considered quite interchangeable. There are different opinions in the literature on the correlation between the concepts of "corporate governance" and "corporate management" (CM) as to which of them includes the other, or whether each of these systems is self-sufficient and operates quite independently according to different principles. In our opinion, it is logical to agree with the authors who consider corporate governance as an integral part of corporate management.

Vladimir Verbitsky, a well-known theorist, and practitioner of Corporate Governance, believes that the efficiency of a company's operation and its competitiveness, which are ensured by the subject area of corporate governance, are primary for the value of a business. In Russian conditions of highly concentrated ownership structure the leading role belongs to majority shareholders, and one of the most important tasks of corporate governance is to protect minority shareholders from the arbitrary behaviour of majority shareholders and the management. In his opinion, separating and to some extent isolating corporate governance and corporate management from each other is unreasonable and contradicts the principles of systematic operation of companies as integral systems. Only their coordinated actions ensure the efficiency of companies and organisations.

Therefore, in the discussion on the composition of Boards of Directors, the position of those who consider the mandatory participation of the CEO in its composition is preferable, which contributes to the convergence of corporate governance and management systems in companies and organisations [3, p. 95].

Until recently, it was considered that corporate governance is a set of mechanisms used to maintain an adequate balance between the rights of shareholders and the needs of the Board of Directors and management in the process of managing the company.[4]

However, international recommendations for good corporate governance have now expanded to include issues related to climate change risks, compliance with environmental and social standards, and threats to the sustainable development of companies and the economy as a whole.

CSR (corporate social responsibility), which in 2004 was succeeded by a broader in content and excessively costly ESG policy[5] of responsible and responsible attitude towards the environment, has become one of the important tools for the implementation of a number of UN SDGs and the concept of sustainable development.

From the very beginning, ESG factors have played an important role in financial and investment decisions, which prompted many companies and organisations to implement ESG policies and disclose them in non-financial reporting. Moreover, in Russia, ESG policies have become much more popular than the very concept of sustainable development, which they are designed to realise.

Due to the high importance of the ESG agenda, a new concept of "sustainable corporate governance" of a company or organisation has emerged, based on the integration of the goals of shareholders and key stakeholders (the so-called interested parties), protecting the interests of society and the environment as a whole. In practice, it means corporate governance in the context of ESG [4, p. 14].

[3] URL: https://www.isaca.org/resources/cobit/cobit-5

[4] URL: https://blog.iteam.ru/korporativnoe-upravlenie-v-rossii.

[5] Environmental responsibility (E — Environmental); high social responsibility (S — Social); high quality governance (G — Governance).

This echoes the ideas of inclusive capitalism and a politically active environmental agenda, which are proposed to be included in the New World Order model.

It is indicative that among the 30,000 words of the Russian Corporate Governance Code of 2014 the word "communication" occurs only once, when it refers to the need to establish it between the management and shareholders, investors, media representatives and other interested parties.

The chapter "Disclosure of Information about the Joint-Stock Company, Information Policy of the Company" emphasises the transparency of a Public Joint Stock Company's activities for the outside world, and describes the proper information policy in general terms.

Thus, communications and their management, which form the basis of the activities of companies and organisations, remained outside the scope of the Corporate Governance Code.

In the business environment, the term "communication" is most often interpreted as a process of exchanging information, emotions, knowledge, and even intellectual property. It is seen as a multifaceted process and the main tool for implementing strategic goals, which not only regulates information exchange, but also integrates and coordinates all areas of activity, acting as the main resource for the existence and successful development of companies and organisations.

In the theory and practice of sustainable corporate governance, the concept of integrated communications (IC), which combines all functions, types, and modes of information exchange of companies and organisations with all stakeholders under the guidance of a single management centre, is becoming increasingly widespread.

In this case, the main role is given to the process of organising mutual understanding and coordination of symbols, messages, procedures, and behaviours necessary for a company to "communicate with clarity, consistency and continuity within and across organisational boundaries" [5, p. 424].

Having considered various interpretations of the term "communication management", the authors understand it as a process of managing corporate integrated communications, during which the companies — senders of information (communicators) apply various principles and methods, ways and techniques, forms and means, technologies and tools to influence all groups of stakeholders (recipients) to implement their tactical and strategic goals.

As a result of proper organisation of the system of data processing, their analysis and forecasting of trends, creation of meaningful messages adequate for each target audience and real feedback, communication management ensures high performance of all departments of companies and organisations.

A survey of more than 700 project managers conducted by the Project Management Institute (PMI) found that "communication is a core competency that, when done correctly, binds each project team member to a common set of strategies, goals, and actions. If these components are not effectively shared among project managers and understood by stakeholders, the project outcomes will be jeopardised, and budgets will be put at unnecessary risk".[6]

The authors consider business communications as an important element of ESG-policy of companies and organisations related to the implementation of a number of Sustainable Development Goals (SDGs) approved by the UN General Assembly. At the same time, the key factor of successful corporate governance nowadays is a high level of integration of communications that determine goal setting, strategy, culture and motivation, values, and meanings, controlling and feedback, effective and analytical efficiency, organisation of business processes, technological and organisational architecture of departments of companies and organisations.

[6] URL: https://www.pmi.org/-/media/pmi/documents/public/pdf/learning/thought-leadership/pulse/the-essential-role-of-communications.pdf?rev=e1f0e9144b3a456fb75e40101632258b

STAKEHOLDER APPROACH AS A KEY FACTOR OF GOOD CORPORATE GOVERNANCE WITHIN THE CONCEPT OF SUSTAINABLE DEVELOPMENT

The process of convergence of the content of the concepts of "corporate governance" and "communication" began in the mid-90s of the last century. On the one hand, constant attempts at integration led to the emergence of the concept of "integrated communications" (IC), which became the next stage in the development of integrated marketing communications (IMC) [6, p. 12].

One of the main differences between integrated marketing communications and integrated communications is that the focus of communications of the former is on consumers and partners, while the latter interact with all groups of stakeholders whose interests are or may be affected to a greater or lesser extent by the activities of companies and organisations.

In Russian scientific and management literature, the term "stakeholder" (owner of a share, unit, etc.) is used in the sense of "involved party", "interested party", "influence group".

The stakeholder-oriented model offers managers and employees of companies to go beyond the traditional interests of shareholders in order to understand the values, expectations, needs and requirements of all stakeholders, previously perceived as external to the company [7, p. 51].

On the other hand, at the global level, various structures of the United Nations Organisation (UN) and the Organisation for Economic Co-operation and Development (OECD) have for many years sought to ensure the active participation and increased contribution of all those interested in addressing socio-economic challenges.

At the G20 Summit on 9–10 September 2023, the G20 countries, including Russia, endorsed the revised G20/OECD Principles of Corporate Governance.

They now include a new chapter on "Sustainability and resilience", which provides guidance to support companies in managing the risks and opportunities associated with climate change and other sustainability challenges.

In particular, the "Disclosure and Transparency" section adds a recommendation to disclose important non-financial information, including business ethics, social issues, attitudes towards environmental protection, respect for human rights, political donations, etc.[7]

Russia, as a member of the G20, follows these principles and recommendations, which, for example, are adopted as one of the 12 fundamental standards for the sustainability of financial systems. In December 2021, the Bank of Russia published an information letter stating that the relevance of ESG factors accounting and mainstreaming as well as sustainability issues is also related to the paradigm shift from a paradigm in which the main goal of a corporation is to make profits and create value for shareholders to a new one that sets the goal of creating sustainable value for all stakeholders, and provides a number of practical recommendations.[8]

The 2023 update of the G20/OECD Principles of Corporate Governance suggests that a new understanding of sustainable corporate governance is emerging, with the focus shifting from resolving conflicts of interest between ownership and management to the more complex task of balancing the interests of all key stakeholders of a company. [4, p. 52].

An important innovation of the G20/OECD Corporate Governance Principles is that, from 2023, the top management of companies and organisations are encouraged to establish communications and dialogue with key managers, shareholders, and stakeholders on sustainability issues, which helps to identify, define, and assess the issues that are relevant to them.

Thus, owing to the strengthening of the role of the stakeholder approach, which forms a better system of sustainable corporate gover-

[7] URL: https://www.oecd.org/corporate/revised-g20-oecd-principles-corporate-governance.htm

[8] URL: https://cbr.ru/Crosscut/LawActs/File/5757

nance, maintains the balance of interests of the parties and reduces non-financial risks, a step has been made towards the convergence of the content of the concepts of "corporate governance" and "communication". This not only improves the efficiency and sustainability of the competitiveness of companies and organisations, but also creates values that are meaningful to the society.

Integrated communications with all stakeholder groups form the basis of modern communication management and sustainable corporate governance.

An important difference in Russian corporate governance practice is that CEOs more often than Western managers refer to government and regulatory authorities as key stakeholders. In recent years, this trend has intensified against the backdrop of the increasing role of the state in the economy. A generally accepted approach to engaging with all stakeholder groups is still being developed.

In addition, in Russia the interests of all stakeholders (not only shareholders, investors and managers) are poorly represented in the Corporate Governance Code and are not adequately protected by corporate governance norms and standards, which is not conducive to the organisation of sustainable corporate governance.

CORPORATE GOVERNANCE PRACTICES IN THE CONTEXT OF ESG

Corporate Governance Codes are of a recommendatory nature and operate on a "comply or explain" principle, so companies and organisations are regularly assessed and rated for the quality of corporate governance and its compliance with adopted international and national codes, standards, and regulations. These assessments largely determine the terms of lending and investment, admission to public procurement, etc., which is vitally important for companies and organisations.

In our country, for example, in addition to private rating agencies, the Bank of Russia conducts annual monitoring of the practices of implementation of Corporate Governance Code principles and recommendations by Russian public joint stock companies (PJSCs) whose shares are admitted to organised trading by Moscow Stock Exchange PJSC or SPB Stock Exchange PJSC.

Thus, the above annual monitoring for 2021 showed that among 179 PJSCs the average level of implementation of the Corporate Governance Code principles from their total number is 78%.[9]

The results of a survey of more than 17,000 respondents interested and engaged in sustainability topics, conducted in December 2022-January 2023, showed that the ESG agenda in 2022 has taken a back seat. Only 52% of the respondents were going to adjust their sustainability goals and revise their ESG strategies. 40% of companies cut ESG development budgets in 2022, however 47% did not do so.

The "S" (social) block surpassed the "E" (environment) aspect in the survey in terms of its importance for Russian companies. Despite the fact that social issues have always been important for Russian companies, aspect "E" has been an absolute priority for business for a long time.

In today's realities, the social agenda is coming to the forefront, and initiatives to support personnel, retain employment, retrain employees, and support human capital are becoming more active. Only 40 per cent of businesses pay attention to aspect "G" — governance.[10]

As a result of a survey by the National Research University Higher School of Economics of 55 large Russian companies (mainly energy and mining companies), more than 70% of respondents indicated external pressure (from the government, large customers and business partners, primarily Western ones) as the main reason for ESG transformation. 35% feel pressure from consumers. ESG penetration into corporate culture leaves much to be desired in most of the surveyed companies.[11]

[9] URL: https://cbr.ru/Collection/Collection/File/43510/Review_corp_0112022.pdf

[10] URL: https://m-p.ru/ESG-Russia-2023.pdf

[11] URL: https://www.hse.ru/mirror/pubs/share/724047784.pdf

Against the background of the growing number of influential supporters of ESG-policy, some Russian companies and organisations take a wait-and-see attitude in the hope that this phenomenon is temporary, while others, like many abroad, practice "greenwashing" (green camouflage) which is limited to proclamations and imitative cosmetic measures. In addition, marketing manipulations have also become very fashionable — advertising and selling products with ideas and labels "eco", "bio", "completely harmless to nature", "environmentally-friendly", "without preservatives", "farm", "organic", etc.[12]

In the practice of some organisations, one can observe a long-known policy within the Corporate and social responsibility (CSR) concept, when they carry out familiar activities, but under ESG banners.

Mass greening, imposed by international standards, is regarded as "ecodictatorship" in a number of medium and small business companies and inclines them to imitate ecoactivism.

Some organisations do not seek to increase transparency, as information openness makes them more vulnerable to regulatory bodies and law enforcement agencies, as well as potential raiders.

At the same time, there are obvious contradictions within the ESG-policy triad itself, when, for example, excessive strengthening of environmental requirements may lead to negative social consequences.[13]

The non-comparability of data from numerous ratings and rankings is noteworthy. This is explained by the fact that each rating agency has its own methodology with a different set of criteria and their weight, and as a result, the same companies may look good in some ratings and worse in others.

Many agencies do not disclose their methodologies, and this allows for subjective selection of indicators and manipulation of results.

It is clear that the development of a generally accepted methodology for rating and auditing companies and organisations to ensure that their activities comply with ESG principles is required. In January 2023, the Bank of Russia published a report "Model Methodology for ESG Ratings" for public consultation in order to create common rating rules to ensure comparability of ESG ratings and thus reduce disharmony in this market.[14]

It should be noted that in a number of cases ESG policies are most likely declarative in nature as a response to a fashionable trend, although organisations are not ready to incur additional costs.

The unplanned costs of social and environmental policies sometimes lead to a conflict of interests of the government, shareholders, and staff. At the same time, several studies repeat the thesis that ESG programmes increase employee engagement and loyalty.[15]

A survey of 237 Russian companies conducted by Plekhanov Russian Economic University in October 2023 showed that "almost 100% of rank-and-file employees have no information about their company's inclusion in ESG ratings and generally have very vague ideas about the sustainability agenda".[16]

Owners and managers of more than half of organisations in Russia do not consider management or governance aspects to be a priority, which with a noticeable lag undeservedly occupy the last place in the ESG triad, although it is they who determine the success or lack thereof in the implementation of this agenda.

However, according to Expert RA rating agency, this does not apply to the banking sector, in which, according to the results of 2022, block "G" (43% of 100 surveyed credit organisations) came out

[12] URL: https://www.b-soc.ru/pppublikacii/novaya-filosofiya-biznesa-ili-esg-besie

[13] URL: https://pltf.ru/2021/12/29/esg-kommunikaczii-osnovnye-vyvody-iz-provedennoj-raso-konferenczii-po-kommunikacziyam-v-oblasti-ustojchivogo-razvitiya/

[14] URL: https://cbr.ru/Content/Document/File/144085/Consultation_Paper_17012023.pdf

[15] URL: https://kontakt.ru/blog/esg

[16] URL: https://www.vedomosti.ru/esg/corporate_governance/columns/2023/10/25/1002405-ryadovie-sotrudniki-mnogih-rossiiskih-kompanii-slabo-orientiruyutsya

on top as the most relevant for development in the current environment.[17]

One cannot but agree with a few authors that this block is of decisive importance, as it is on this block that companies' performance in the "E" and "S" directions depends. For example, Svetlana Bik, head of the INFRAGREEN expert and analytical platform "Infrastructure and Finance for Sustainable Development", emphasises that "nothing happens in a company or a bank if it is not approved in the management or governance plan. "G" is the main thing in ESG, because without a management or governance decision, neither E, nor S, nor other letters of the alphabet will move" [8, p. 36].

This is one of the consequences of the fact that international and Russian Corporate Governance Codes do not adequately reflect the issues of communication management/governance. The "G" (governance/management) is often translated as "corporate governance". This is explained by the fact that its content is actually borrowed from many provisions of Russian and international corporate governance codes.

Assessment of corporate governance quality (block "G") is based on the analysis of a limited set of indicators taken from the Corporate Governance Code, such as: ownership structure, integration of ESG factors into the long-term strategy, influence and rights of shareholders, the state of the stakeholder management system, risk management and auditing, control, etc. For example, this is characteristic of the ESG-rating methodology of the National Rating Agency.[18]

In the model methodology for ESG ratings published in January 2023, the Bank of Russia proposes to assess such elements of corporate governance (block "G") as: ownership structure and implementation of shareholders' rights, management bodies, strategy, remuneration system, risk management and information disclosure.[19]

The methodology for assessing the quality of corporate governance of the Bank of Russia and most rating agencies provides for a discussion of stakeholder engagement, but only with regard to the existence of an approved strategy and work plan in this area.

The sections on the information policy of companies and organisations focus on information disclosure and transparency, and there is little discussion of communications management, especially integrated communications management.

In the field of sustainable development (SD), block "G" assesses only the facts of inclusion of ESG factors in the long-term strategy of companies and organisations, the presence of an appropriate head or division and risk management system.

Thus, when analysing the quality of corporate governance and compiling ratings and rankings in the field of ESG-policy, there is no assessment of the fundamental (key) factor "efficiency of company management/governance" as such and, in particular, the management of integrated business communications. In other words, the quality of the management process itself, and even more so the management of integrated communications, is not assessed.

The authors of the article propose to correct this shortcoming, to go beyond the Corporate Governance Code, to change the assessment criteria, to expand the set of management indicators and to include in block "G", for example, such metrics as indicators of the quality of integrated communications management, which decisively affect the effectiveness of sustainable corporate governance based on the stakeholder approach. For this purpose, it is necessary to expand the methodology for conducting communication audits and non-financial reporting.

For example, it is possible to develop easily measurable criteria on the basis of the broader in content system "corporate management" and its constituent part "communication management".

The national standard of the Russian Federation "Quality Management. Organisation Quality" GOST R ISO 9004–2019 provides guidance on how to achieve sustainable success of an organisation in a complex, demanding and constantly changing environment.

[17] URL: https://raexpert.ru/researches/banks/esg_1h2022

[18] URL: https://www.ra-national.ru/ratings

[19] Ibidem.

Its application together with the quality management system of the national standard GOST R ISO 9001–2015 can provide a unifying framework for the values and strategies of the organisation. ISO 9001:2008 "Guidance on the concept, content and use of the process approach for management systems" can also be applied.[20]

These standards can be useful in expanding the set of criteria for assessing and rating the management of the quality of management processes and the interrelationships between them, as well as the management of resources, primarily human resources, and the new knowledge economy.

According to the researchers of the Kuban State Technological University, the evaluation criteria for communication management may include the following indicators:

- the degree of integration of the communication and overall strategy of companies and organisations;
- availability and completeness of scenarios for the development of the communication situation;
- the degree of regular interaction and coordination of actions at different levels of the management hierarchy;
- efficiency of information processing and feedback;
- consistency of internal and external communication activities, etc. [9, p. 1].

Thus, an established system of integrated communications with all stakeholders ensures high quality of communication management, which determines the effectiveness of ESG-policy, as well as all areas of activity of companies and organisations.

SOME PECULIARITIES OF COMMUNICATION MANAGEMENT IN RUSSIA

In the conditions of growing uncertainty and global turbulence, the highest possible decentralisation of management (polycentricity), delegation of a number of powers to lower hierarchical levels, rapid adaptability to uncertainty and flexibility in the continuous production of innovations come to the fore. At the same time, it should be borne in mind that if the interaction between structural units is poorly coordinated, the decentralisation policy can disrupt the integrity of the semantic unity of management decisions and their prioritisation, and distort the assessment of the efficiency of companies and organisations.

However, there is a problem of dependence, albeit weakening, on previous managerial experience within the administrative-command system and authoritarian management model. Managers need to learn not only to give orders and instructions, to force, coerce, pressure, and manipulate, but first of all to motivate and persuade.

A survey conducted in 2018 by the Centre for Social Design "Platforma" at the request of the Independent Directors Association (IDA), asked the following question: what management style, in your opinion, will dominate in Russian companies in the next few years? Over 100 IDA members — independent directors, CEOs of Russian companies, and independent experts — responded as follows:

75% — directive management;
13% — entrepreneurial management;
11% — collegial management;
1% — other.[21]

This implies that managers who are used to managing by order methods will remain in the majority for the time being, because they are afraid of change or are not ready to complicate their work with procedures of coordination, approvals, delegation of part of authority, etc. even for the sake of increasing efficiency.

There is often a practice when communication is considered by managers as a one-sided semantic impact on the recipients, although within the framework of the activity approach the subjects of integrated marketing communications and integrated communications have long been considered equal partners in the information process.

[20] URL: https://www.iso.org/obp/ui#search

[21] URL: https://pltf.ru/2018/12/19/korporativnoe-upravlenie-v-rossii-krizis-zhanra-i-nadezhdy-na-budushhee/?print=print

According to the authors' observations, managers at different levels often fail to achieve the main goal of communications — to ensure accurate understanding of the messages or orders being communicated. Some of them, for various reasons, do not set themselves such a goal, others either lack motivation and have a formal attitude, or do not have sufficient knowledge, abilities, and skills, as well as vocabulary for this purpose.

The integrated approach to organising communications practiced abroad is becoming increasingly common in Russian advanced companies and organisations, especially among large and stable ones, traded on stock exchanges or related to finance and investment.

The analysis of domestic and foreign sources shows that the model of integrated communications has not been finally developed not only in Russia, but also in economically developed countries.

The concepts of integrated marketing communications and integrated communications continue to develop in the world, but in Russia, the emerging opportunities for updating approaches, strategies, tools, and technologies are discussed and implemented with a noticeable delay. Some of them have not been put into practice at all for a long time.

A nationwide study of internal communications (IC) conducted in 2022 by "ECOPSY Consulting", which surveyed more than 400 people involved in internal communications (IC) in medium and large companies in various industries, identified the three key stages of their development:

- Informing.
- Involvement of employees in the company with established feedback in different directions (vertical, horizontal, and diagonal). This ensures the achievement of mutual understanding in the organization — communication and dialogue become a necessary part and condition for the formation of corporate culture.
- Communication of values and meanings to each employee, influencing his/her behaviour.

"ECOPSY Consulting' analysts estimate that 80% of the companies surveyed are at the first stage, 15% are at the second stage and only 5% are at the third stage. It is clear that each of them has to solve the problems of all three stages to a greater or lesser extent.[22]

Studies of internal communications in 6 Russian organisations have shown that, as a rule, services and departments do not communicate with each other, as they consider themselves to be independent units [10, p. 8].

In theory and practice, business communications in companies and organisations are quite often organisationally and/or functionally divided into internal and external. According to the authors of the article, the flaw in this dichotomy is that it does not allow managers to fully understand and implement the ideas of integrated communications. Russia initially gave priority to external communications (with shareholders, suppliers, customers, partners, investors, etc.) without realising the importance of creating an optimal internal corporate environment as a basis for all areas of business communication in order to solve common tasks of increasing motivation and efficiency of companies and organisations.

It is impossible to organise effectively working external communications without establishing an optimal internal system, creating standards of behaviour in accordance with the Corporate Governance Code and forming a corporate culture in accordance with the company's code of ethics.

In other words, the formation of an integrated management system adequate to the real requirements and market trends should start with the integration of internal communications.

In the practice of many Russian companies, different areas of communications (media, marketing, advertising, public relations, investor relations, etc.) are still quite autonomous, report to different managers, are not organisationally and functionally

[22] URL: https://intercomm.media/wp-content/uploads/2023/02/zerkalo-kommunikaczij_otchet-po-issledovaniyu_netochnosti-lr3.pdf

united, interact poorly with each other and do not form one coherent system, solving their own tasks.

Such fragmentation and often duplication of functions not only reduces the effectiveness of communications, but also generates intra-corporate conflicts in the struggle for budgets and influence. Scientific and applied articles continue to debate which communications function should be the dominant one — public relations or marketing.

In practice, this does not always manifest itself in correct competition between the relevant departments in the struggle for leadership, budget reallocation and staff rearrangements and promotions.

In order to create an adequate communication system, it is necessary to develop a holistic management system from one meaningful centre that creates messages for all stakeholders, distributes them through appropriate channels and ensures that feedback is continuously received.

The totality of horizontal, vertical, and diagonal links of all divisions and departments at different hierarchical levels forms a system of integrated communications based on a logical distribution of authority and responsibility with regular evaluation of their effectiveness.

The communication strategy should incorporate the values and meanings that underpin the work of businesses and organisations.

Ideally, a kind of ecosystem of integrated communications with a high explanatory potential should be created, which will provide a synergy effect and increase the company's efficiency.

For this purpose, it is necessary to abandon excessive adherence to vertical management in the pyramid of hierarchies in favour of a more flexible system, to learn how to establish horizontal and the more so diagonal links, etc.

The results of the communication process largely depend on corporate culture, which is expressed in a set of characteristics such as attitudes, values, interests, habits, social norms of behaviour, traditions, limitations, expectations, and concerns.[23]

[23] URL: https://reports. weforum.org/

Managers of Russian companies and organisations face a difficult but inevitable task: to take into account new trends in the development of integrated communications, which include interaction with all groups of stakeholders, who are gradually taking control of communications in terms of form and content.

CONCLUSIONS

In Russia, depending on the form of ownership, sectoral and regional affiliation, size and age of enterprises and organisations, different approaches, models, principles, methods and techniques of management and business communications are used.

Due to the stakeholder approach, there is a process of convergence of the content of the concepts of "corporate governance" and "communication".

The concept of integrated marketing communications still prevails in Russian theory and practice along with integrated communications. At the same time, they can be combined in many different ways, for example, modern models and principles can co-exist alongside traditional ones.

The authors believe that the division of business communications into internal and external ones that still exists in Russian science and practice contradicts the principles of integrated communications, prevents researchers and managers from reformatting their understanding of the essence of modern trends, and reduces motivation for development.

In order to improve competitiveness, companies and organisations need to develop a system of internal communications that meets the interests of all stakeholder groups.

Against the background of a crisis of trust between business, government and society, the stakeholder approach to the management of companies and organisations has become increasingly widespread in Russia in recent years, mainly among companies listed on the stock market and interested in sustainable development.

However, the number of organisations effectively engaging with all target audiences is still

relatively small. This suggests that there is little awareness among managers that stakeholder communications provide the mutual understanding between all stakeholders necessary for optimal decision-making.

Understanding the content features of integrated communications, their organisational structure, tools, and management principles remains a debatable issue. Methods of their analysis and rating need further development. Therefore, the authors propose to expand the set of management criteria and indicators of block "G" in assessing the quality of ESG-policy of companies and organisations and to use the systems "corporate management" and "communication management" for this purpose.

The development of criteria and indicators of the quality of integrated communications systems, ESG-policy and sustainable corporate governance can become a direction for further research.

ACKNOWLEDGMENTS

The article was prepared based on the results of research carried out at the expense of budget funds on a state assignment to the Financial University.

REFERENCES

1. Park K.H. Have corporate governance systems in the world converged in recent years? *International Journal of Business, Humanities and Technology*. 2012;2(7):1–11. URL: https://www.ijbhtnet.com/journals/Vol_2_No_7_December_2012/1.pdf
2. Tricker R.I. Corporate governance: Practices, procedures and powers in British companies and their boards of directors. London: Gower Publishing Company; 1984. 319 p.
3. Verbitskii V. From the ideal to the real — 2.0: Evidence-based corporate governance. Moscow: Alpina PRO; 2022. 498 p. (In Russ.).
4. Kiseleva E.V., Zagidullin Zh.K., Zhuravlev A.V. Corporate governance in the context of ESG: Redefining sustainability. Moscow: Da-Strategiya; 2021. 31 p. URL: https://corptransparency.ru/documents/corporate-governance-in-the-context-of-esg.pdf (In Russ.).
5. Thøger Christensen L., Fuat Fırat A., Torp S. The organisation of integrated communications: Toward flexible integration. *European Journal of Marketing*. 2008;42(3–4):423–452. DOI: 10.1108/03090560810853002
6. Lopukhin A.V., Plaksenkov E.A. The impact of integrated business communications on the success of enterprises and organizations. *Mir novoi ekonomiki = The World of New Economy*. 2023;17(4):41–52. (In Russ.). DOI: 10.26794/2220–6469–2023–17–4–41–52
7. Dudenkov D.A. Stakeholder-oriented model of the company in the theory of corporation management. *Promyshlennost': ekonomika, upravlenie, tekhnologii = Industry: Economics, Management, Technology*. 2014;(1):50–53. URL: https://cyberleninka.ru/article/n/steykholder-orientirovannaya-model-kompanii-v-teorii-korporativnogo-upravleniya (accessed on 20.09.2023). (In Russ.).
8. Bik S.I. Without G, neither E, nor S, nor other letters of the alphabet will move. *Bankovskoe obozrenie*. 2022;(10). URL: https://bosfera.ru/bo/bez-g-ne-budut-dvigatsya-ni-e-ni-s-ni-drugie-bukvy-alfavita (In Russ.).
9. Rubin G. Ya., Surovtseva E.S. Assessing the effectiveness of activities in managing organizational communications. *Organizator proizvodstva = Organizer of Production*. 2009;4(1–3). URL: https://cyberleninka.ru/article/n/otsenka-effektivnosti-deyatelnosti-po-upravleniyu-organizatsionnymi-kommunikatsiyami (accessed on 06.11.2023). (In Russ.).
10. Boldyreva N.V. Role and value of internal communications in the conditions of modern business. *Vestnik Evraziiskoi nauki = The Eurasian Scientific Journal*. 2018;10(1):3. URL: https://esj.today/PDF/53ECVN 118.pdf (In Russ.).

ABOUT THE AUTHORS

Alexander V. Lopukhin — independent researcher, expert, Moscow, Russia
https://orcid.org/0000-0001-8360-3541
Corresponding author:
alopukhin@yandex.ru

Evgeny A. Plaksenkov — PhD SKEMA Business School, Professor of the Moscow School of Management SKOLKOVO, Moscow, Russia
https://orcid.org/0000-0003-2196-9059
evgeny_plaksenkov@skolkovo.ru

Sergey N. Silvestrov — Dr. Sci. (Econ.), Professor of the Department of World Economy and International Finance, Financial University, Director of the Institute of Economic Policy and Economic Security Problems, Moscow, Russia
https://orcid.org/0000-0002-7678-1283
SSilvestrov@fa.ru

Authors' declared contributions:
A.V. Lopukhin — evolution of the conceptual apparatus of corporate governance in the process of integrating business communications.
E.A. Plaksenkov — role of stakeholders in sustainable business development, formulation of the goals and objectives of the study.
S.N. Silvestrov — ESG agenda for sustainable corporate governance, development of the concept and general management of the writing of the article.

Conflicts of Interest Statement: The authors have no conflicts of interest to declare.

The article was received on 14.01.2024; revised on 28.01.2024 and accepted for publication on 15.02.2024. The authors read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-58-68
UDC 336.02,336.7(045)
JEL B20

Career or Family: A Woman's Difficult Choice (On the Nobel Prize in Economics in 2023)

Yu.P. Voronov
Institute of Economics and Industrial Engineering,
Siberian Branch of the Russian Academy of Sciences, Moscow, Russia

ABSTRACT

This article presents the achievements of the 2023 Nobel laureate in economics, Harvard University professor Claudia Goldin. The obstacles to women's employment related to the fact that the initially established structure of jobs was focused on male labor are considered. The "quiet revolution" discovered by the laureate and consisting of a sharp increase in the age of first marriages and a switch in women's motivation from earnings to careers is analyzed. The importance of flexible working conditions when women choose a place of work and increasing women's participation in the economy was highlighted. As an example of maximum effort and approach to working conditions convenient for women, the laureate cites the pharmaceutical sector, both industry and trade. The problems of the existence of a "natural level" of women's participation in the economy are touched upon. Finally, the impact of the 2021–2022 pandemic on women's choice between career and family is examined.

Keywords: women's work and labour; inequality; career; family; employment; family responsibilities; natural level; flexible working conditions; time of marriage; contraceptives; abortion; pandemic

For citation: **Voronov Yu.P. Career or family: a woman's difficult choice (on the Nobel Prize in Economics in 2023).** ***The World of New Economy*****. 2024;18(1):58-68. DOI: 10.26794/2220-6469-2024-18-1-58-68**

INTRODUCTION

Claudia Goldin, a professor at Harvard University, began to be positioned as a potential winner of the Nobel Prize in Economics just a few days before the Nobel Committee decided in her favour. Earlier, Edward Glaser, a professor at the same university, with work on urban economics, led the predictions. The two contenders for the 2023 prize had joint papers. The most famous one is on the fight against corruption in the United States from 1870 to 1920, where they act as editors [1].

And if E. Glaser had been chosen, the Nobel Committee would have even then shown its insistence not to interfere in politics — political tensions come and go, while economic science moves forward, trying not to intersect with them. It would be illogical to give the prize to two researchers, since the main directions of their work are devoted to completely different topics.

The research interests of 2023 Laureate Claudia Goldin are not dependent on current events — no matter what happens in the world, women's labour issues will remain on the agenda for a long time to come.

With its choice, the Nobel Committee reaffirms its commitment to separating economics from politics. In the Soviet Union, V.I. Lenin's thesis was popular: "Politics is the concentrated expression of economics" [2], but now not only the Nobel Committee, but even the leadership of Communist China says: "Economics is one thing, but politics is quite another".

In my opinion, the main achievement of the winner of the 2023 Nobel Prize in Economics is that she has taken the problem of women's labour and women's place in the economy out of the political sphere with its demonstrations, slogans and demands into the sphere of natural regularities and quiet practical solutions.

No less importantly, it has shown how many diverse and intersecting processes can be hidden in the dynamics of just one indicator, using the specific example of differences between men's and women's wages.

MALE BARRIERS

The main problem with pay differentials lies in the fact that initially there were fewer women in the workplace than men. This is due to two important circumstances.

Firstly, the workplaces where women came to work were originally formed for men: in terms of the daily regime, physical load, level of regulation and other parameters. The standard packing of 40–50kg bags of sand or cement was clearly designed to be lifted by men. The working day from start to end is convenient for the organisation of production, but during this time it requires a complete renunciation of any family and parental concerns.

Less well known is such a characteristic as weak regulation. Let me give an example from my personal experience. One day, the management of the industrial association where I was working at the time, set the task of reducing defects in the manufacture of switch cabinets. It turned out that the main source of defects — errors in the installation supervision (from the back side — the contacts between the circuit boards of the cabinet are connected by wires). The assembler looks at the drawing, which shows the connections, and in accordance with it the assembler performs the work. But as his eyes move from the cabinet to the drawing and back again, he may forget what he has just seen. Then we came up with the idea that the instructions for each micro-operation should be recorded on a voice recorder. To our surprise, after a couple of months of defect-free work, the male installers started to quit — they couldn't bear to listen to the instructions all day long. They were replaced by women who were grateful for the step-by-step instructions.

Second, men were not interested in women taking their places, even if they had sufficient qualifications to do so. The entry of women into these jobs may be a signal to other women. As a consequence, competition will increase, and it is quite possible that starting salaries and then all salaries will be reduced. Therefore, the struggle for the "purity" of the profession, against its "pollution" begins.

The term "pollution" was introduced in this context by M. Douglas, a professor at Northwestern University (USA), one of the representatives of social anthropology who established it as an independent science. In her 1966 book, she noted that in many cultures women were separated from men as "unclean creatures" [3]. These prejudices have almost disappeared and then spread again, but they have almost always existed in the realm of production and consumption. Even when changes in technology allow women to work in new jobs, men do not approve of it.

In the concept of "pollution" gender discrimination is a consequence of men's desire to prevent competition from women for their jobs and incomes [4].

The prestige of a profession in this case exists only for that part of society that is interested in maintaining the status quo, and it is not connected with any objective requirements regarding qualifications and skills. But prestige can be undermined ("contaminated") by hiring those who belong to a different social group: by nationality, race, degree of family wealth, etc. Differences by gender are not unique here, but only one of many [5]. They are only more frequent and more visible.

According to the "pollution" concept, sex segregation will be greater where skill requirements and earnings are higher than the median values for jobs to which women are already admitted. Since this median is movable, segregation into "male" jobs will not change monotonically in the future.

A NEW KIND OF ASYMMETRICAL INFORMATION

Overlaid on the problem of men protecting their workplaces is one of its modes — "asymmetrical information". It is, according to Claudia Goldin,

a key element in the concept of "pollution". But the interpretation of asymmetric information is different from that developed by other Nobel laureates in economics — when a seller or buyer has more information about a product or service than the other party to the transaction. George Akerlof, Michael Spence, and Joseph Stiglitz won the Nobel Prize in Economics in 2001 for introducing the category of asymmetrical information into economic analysis.

The first of them showed that asymmetrical information can lead to backward selection of goods. Due to incomplete information, tenants with low ability to pay and sellers of low quality cars start to dominate the market. M. Spence demonstrated how well-informed market participants can increase their market turnover by "signalling" to those who are worse informed.

Joseph Stiglitz noted that an uninformed market participant is sometimes able to obtain information from an informed one, for example, through constant monitoring of advertising or by choosing a specific form of contract for a transaction from a list of possible ones. The 2001 laureates proved that asymmetrical information is present everywhere: some market participants are more informed than others.

The "pollution" theory continues this line of research. Men who put up barriers to women applying for "masculine" jobs are aware that they will do well with their responsibilities. But just in case, they don't report it. Highly demanding jobs continue to be held by men, where they are also trained [6].

Some hierarchical models have introduced bonuses for men if they work together with women who are higher up in the hierarchy. In some cases, there has been a decline in performance in a mixed team due to flirtation, poor rapport or mutual understanding, ambiguity, or tension in the relationship [7]. A long-standing paper on the British coal industry in the early twentieth century indicated that one of the reasons women were not allowed to work in mines was that darkness and solitude when tired or agitated led to "unworkable relationships" [8]. In other words, the reason for not allowing women to work underground was more insinuation and gossip than concern for women's health.

"THE QUIET REVOLUTION". POSTPONED WEDDINGS

The radical change in the role of women in the economy, which affected many areas of life, occurred in such a short period of time that Claudia Goldin called it the "Quiet Revolution". The essence of it is that instead of focusing only on earning money, women began to prioritise their careers and to get married later in life.

In 1966, nearly three-quarters of US women who graduated from college were in majors where women were in the majority; only 10% were in majors where men were in the majority; and the remaining 15% were in majors where both sexes were roughly equally represented (mathematics, psychology, sociology, anthropology, linguistics, history, and music). In the early 1970s, the difference between "male" and "female" specialities was noticeably erased. The most likely reason for this was that women began to study business and management, and there was an outflow of women from school education.

Obtaining education, the attitude to which was consumerist, has now become an investment. Previously, it was typical only for men.

According to the results of research by C. Goldin, the "quiet revolution" began in the USA in the late 1960s and for female college graduates it ended in the second half of the 1970s. For other (in terms of education level) categories of women it lasted until the mid-1980s.

Such widespread social change cannot be due to a single cause — there are several factors at play, including changes in the law. In 1964, the Civil Rights Act included an article prohibiting discrimination on the basis of sex in layoffs and promotions. In 1972, the Education Act was amended to provide equal access for women and men. The resurgence of feminism through its integration with the civil rights movement and

the rise of anti-war sentiment had some impact. The "Quiet Revolution" was preceded by a "Noisy Revolution", when feminism as a movement for women's equality developed in isolation.

The "Quiet Revolution" was launched by the generation born in the late 1940s. "They were unwitting soldiers of a coup that transformed women's employment, education and family life" [9].

An important point was the increase in the age of first marriage. For college-educated women born between 1929 and 1949, the median age of first marriage was 23. For those born in 1957, it increased by two and a half years, and in 1965 it increased by another year. The increase in the age of marriage affected all groups of women, but it was greatest for those who had graduated from college.

At the same time, there were shifts in the choice of speciality. By 1970, the attractiveness of traditionally "female" professions, such as teacher, librarian, nurse, and social worker, had fallen sharply, and by 1990 it had reached a minimum. Other specialities began to attract women to a greater extent: doctor, lawyer, manager, and university teacher. This process was most rapid in the 1980s, involving women born between the early 1950s and the mid-1960s, who became leaders in many fields. Many of them changed the speciality in which they were trained, based on their expectations of their future careers. And this psychologically pushed back the desire to marry.

This generation of women has faced many demographic changes. They were born during a fertility spike, which is usually accompanied by an increase in the proportion of girls born. When they reached the age of marriage, competition for a chosen mate was stronger than usual, which was another factor in favour of choosing a career over starting a family.[1] The same circumstance raised the average age at first marriage. The impact of the economic downturn in the mid-1970s should also be added to the mix.

[1] Joshua Angrist, winner of the 2021 Nobel Prize in Economics, has also addressed this problem.

CONTRACEPTIVES AND ABORTIONS

This decline in the United States was compounded by the legal authorisation of free sales of the contraceptive pills (this important factor in the Quiet Revolution, Claudia Goldin has noted repeatedly and quite thoroughly). For many years, in most states, only married women could buy them; unmarried women were forbidden to do so. Then suddenly a law came out allowing contraceptives to be sold to everyone. It is hard to say whether this was a result of the feminist movement for equal rights, but it affected all women, regardless of their level of education or skin colour [10]. The impact of this law on the choice between career and family has been more significant than those against gender discrimination. Statistics show a sharp rise in women's demand for jobs. At the same time, the number of divorces increased, and the number of marriages decreased. All three indicators showed an increased desire of women to lead an independent life.

Investments in paid education, which gives an opportunity to make a career, have also increased. C. Goldin and other researchers argue that women became less interested in increasing the family budget when choosing a place of work — they were employed even if their earnings were significantly lower than those of their husbands. As real incomes grew, the share of married women among employed women increased, even though their incomes increased less in comparison with their husbands' incomes.

This is one of the results of applying the original methodology of Claudia Goldin — it combines time series analysis with the analysis of ratios of indicators in certain periods of time. Compared to correlation analysis, this is a more sophisticated method (cross-analysis), in which periods of consistent change in the indicators themselves and the relationships between them are distinguished in a meaningful rather than formal way.

However, the "Quiet Revolution" has not eliminated the gender pay gap. In her work "The Great Gender Convergence. Its Last Chapter" [11]

Claudia Goldin noted that the main result of the movement towards gender equality in the United States and other developed countries was only a reduction, not elimination, of the gender pay gap. The latter is unattainable because men and women occupy different jobs.

Voluntary avoidance of motherhood is a powerful factor in women's participation in the economy. The opportunity for this varies from country to country, as does the practice of abortion.

According to research by Claudia Goldin and her husband, from 1972 to 1979, the proportion of college graduates who married within two years of earning a degree declined [12].

Contraceptives directly and immediately lowered the barriers to choosing a long-term career over family. They gave almost complete certainty of freedom from possible accidental pregnancy. Postponement of marriage for one or two years at first, and then again and again, is accompanied by a switch to regular contraceptive use. Thus, the proportion of women in all training and retraining programmes has increased dramatically since the 1970s.

Prior to 1973, abortion in the United States was legal in only a few states. This federal decision did not mean that it would quickly become widespread, due to the practice of using the pill [13].

This was not the case in Japan, where the average age at marriage rose steadily until 1999, with no significant increase in contraceptive use and women's choice of career over family. Nevertheless, the number of abortions increased, and the birth rate declined. The very possibility of using the contraceptive pill allowed women to better plan their future labour market path at the very beginning, and this was taken into account not only by them but also by employers.

The late 1960s and early 1970s saw major changes in American society, catalysed by the Vietnam War. The anti-war civil rights movement led to a resurgence of feminism. As early as 1968, the vast majority of girls in the United States expected to follow their mothers' life path, but within a few years their preferences had radically changed in favour of choosing their own future. Without denying the role of new phenomena in public life, Claudia Goldin believes that the decisive role here was played not by changes in public consciousness, but by the availability of contraceptive pills, i.e., mass individual decisions were more important than the public mood in general or political demands and changes.

WOMEN'S LABOUR AND FLEXIBLE WORKING CONDITIONS

In fact, through her research, Claudia Goldin has moved the discussion of pay inequality beyond the usual references to sexism. She showed that this gap is explained by "temporal flexibility", women's need for flexible working conditions or shorter working hours in order to be able to fulfil their family responsibilities.

Based on the results of many years of research, Claudia Goldin concluded that "if some women are less active in demanding flexible working arrangements, not much will change" [14]. In her view, it should be a question of creating a new structure of workplaces that are more likely than at present to allow for the introduction of flexible working conditions, for both women and men. These shifts are already under way in areas such as applied and fundamental science and health care.

Of all labour conditions, flexible working hours and reduced working hours are the most important for women workers. C. Goldin notes that in the 2010s, demands for shorter or contractual working hours and a ban on overtime hours became popular in the labour movement.

Employers in the retail sector, where demand depends on the weather, upcoming holidays, etc., have been the most accommodating in this respect. Some female workers in this sector have been attracted to work "on demand" — when sales are at their peak.

It is well known that irregular working hours, when workers are obliged to stay at their workplace when necessary, result in higher wages.

Women are significantly more likely than men of the same age to work reduced working hours.

For some of them, very specific hours and days are preferred, for example, if they are studying or have to accompany their children to school or kindergarten. For such workers, "on-call" work is unacceptable. The inability to plan for family responsibilities cannot be compensated for by high earnings. It is difficult to identify the preferences of all women workers — such statistics are not available, and the existence of these one-off surveys is short-lived.

A general comparison of men's and women's wages tells us little. There are many associated factors related to working conditions and daily routine. If all workers with equal labour productivity were to receive the same wage for the same work, the difference in pay would still remain and would not only concern differences by gender.

From the results of research by C. Goldin, it follows that the longer the average length of a labour day, the higher the hourly wage. This correlation is more clearly observed in business, finance, and legal services; it is weaker in some sectors of the economy due to the development of information technology, but it is present almost everywhere else.

Skilled workers with high wages receive a premium to their hourly wage if they work more than 50 hours per week. The pattern is slightly different for low-wage workers. They have a substantially lower increase, but their hourly wage declines if they start working less than 40 hours per week.

Taking these features into account, C. Goldin concludes that the shorter the working day, the lower the hourly wage, and for both sexes. But since women's working day is shorter on average, the wage gap becomes larger due to this [15]. The differences in wages that can be attributed to the influence of this factor are quite significant.

But this also conceals a huge functional variety of workplaces and the possible organisational conditions for working in them. Some have to be occupied around the clock, e.g., operator positions in continuous production units, while others have to be occupied only in one shift. The latter are more attractive to women.

For the author, an example of such fundamental restructuring of workplaces remains the real promotion of the "8–24" principle developed in the 1970s by Vladimir Ivanovich Rusaev, director of the Research Institute of Complete Electric Drive in Novosibirsk. The principle was deciphered as "8 hours of people work, 24 hours of equipment work". This implied the developers' orientation to create such equipment, which after maintenance during the first shift could work the remaining 16 hours a day only under the supervision of a small number of specialists.[2] Obviously, the resulting new workplace structure would be more suitable for women.

As real incomes increase, married women participate more actively in the economy, even when their earnings growth is substantially lower than that of men.

But, as in the case of changes in the structure of jobs, things are not easy here either. As it turns out, families can be divided into "contractual" and "altruistic" families. In "contractual" families, the expediency of employing a housewife is discussed, while in "altruistic" families the decision is made regardless of how much it will improve the family budget: if a woman wants to work, how can we not meet her needs? This division exists to a greater extent in theory than in life, because in one situation the family manifests itself as "contractual" and in another situation as "altruistic".

In the case of the first category of families, the science has developed to its full potential [16]. All the developments in the field of economic equilibrium, made for research in macroeconomics, began to be applied to contractual relations within the family. The Nash equilibrium — when none of the participants can increase its benefits by unilaterally changing its decision — became the most popular. In this particular case, researchers use modelling of two situations: when a family

[2] For many reasons, this principle was practically implemented in the Soviet electrotechnical industry (in the structure of which the Institute was located) only fragmentarily. Twenty years later, this principle was taken up and more fully implemented by the Japanese company Hitachi.

woman is preparing to make a decision on employment and when such a decision has already been made and approved of [17].

These processes, as C. Goldin has noticed, are accompanied by reverse processes: a decision is made to leave work and concentrate on the family. There is also a division of families into "contractual" and "altruistic" families. But the difference between them is different [18].

WORKPLACES OF "GOODNESS AND EQUALITY"

In the mid-2010s, Claudia Goldin and her husband asked themselves which sector of the economy could serve as an example of maximising equality between women and men. It turned out to be the pharmaceutical industry [19].

In 1970, on the eve of major changes, the pharmaceutical industry had relatively low wages for people with secondary specialised education, and the pay gap between men and women was not so low. Male pharmacists were most often self-employed, with their working hours being about the same as those of full-time employees. The self-employed received a decent bonus based on good performance over a specified period, and women with children in part-time employment (reduced hours or part-time working week) received substantially less than men, among whom full-time employment was maximised. But women in the pharmaceutical industry make up the majority of employees. And there is an explanation for this.

This industry has the smallest gap between men's wages, which is accompanied by two other specific characteristics: the wage gap is also lower for other categories involved in the business, and wage differences between workers with different levels of education are smaller.

Executives at all levels (at full-time employment) receive only 7% more than rank-and-file employees, and each owner receives only 12% more dividends than the average employee. In addition, the industry has the highest proportion of part-time employment (part-time of permanent employees + outsourced self-employed). As the prevalence of part-time work has increased, the proportion of women has begun to rise. There are no differences in hourly wages between full-time and part-time workers — they have been consistently decreasing for forty years.

At the same time, there was a sharp expansion of the assortment, which contributed to the unification of the process of servicing potentially or actually sick customers, standardisation of sold goods and active use of information technologies. Large wholesale consumers appeared on the market: hospitals, polyclinics/out-patient clinics, counselling centres.

As a result, the share of independent pharmaceutical companies and pharmacies was decreasing, the number of allowable claims of owners to receive large (compared to salaries) profits and dividends was reduced. Supply began to exceed demand on average, and the proportion of part-timers increased. All these changes reduced the gap in hourly wages between men and women.

As a result, pharmacists in the United States are the most gender-equal profession in the world. C. Goldin and L. Katz emphasise that the transformation of the industry has not been through anti-discrimination policies or even through regulatory measures that are unique to the pharmacy profession. It was more about changing the structure of the workplace, increasing the demand for pharmacists and reorganising work so that the industry became as family- and female-friendly as possible.

But making the workplace structure women-friendly is a costly endeavour. And Claudia Goldin has worked to get at least a rough estimate of such costs [20]. Then it would be possible to understand how the economy would benefit from the increased attractiveness of transformed workplaces for women who combine work and family care. The innovations that C. Goldin considered were divided into three types: breaks during the working day, reduced working hours for a certain period of time and flexible working hours during the day.

Particular attention has been paid to the transition from employment to self-employment, which

is seen as a private but significant way of changing the structure of jobs. For some professions, such as dentists, pharmacists or those working in retail, this involves making an initial investment and often results in longer working hours. For other professions (e.g., counselling), the transition to self-employment does not require significant investment or recruitment, giving women the opportunity to set their own hours of work, start and end times, which are acceptable to them.

In fact, the choice is not between working conditions — it is the cost of moving to a more attractive, flexible schedule. And the costs vary considerably depending on the type of work and industry.

C. Goldin uses the term "vignette" to describe the subtleties in working conditions, which can be translated as "curl" or "particularity".[3]

The cost-effect of providing more convenient working conditions was monitored by several parameters: the proportion of women in an occupation or specific speciality, the wage gap between women and men, the proportion of underemployed and self-employed (private practice).

Many high-paying jobs requiring high qualifications have already undergone stages of transformation towards more flexible working conditions. And the demand for such changes persists despite this. In the studies, out of the 90 occupations surveyed, only in a few people dared to make personal investments for the sake of better working conditions. The most attractive improvement was the possibility to take breaks during the working day for one or two hours. During this time, a woman can fulfil some of her family duties: picking up her child from school, walking him to the sports centre, etc.

In addition, I would like to give an example from my own applied research experience. It is from a completely different field, although the practical goal of the research results is the same — to create more flexible working conditions for women and thereby increase the attractiveness of such work for them.

In the 1960s, I was seconded to Vladivostok to promote the rise of Far Eastern sociology. Of the many empirical studies that could be undertaken at that time, the most extensive was a survey of the crew and women workers of the "Kraboflot" organisation. It was expected that the results of the sociologists' work would help reduce staff turnover and increase labour productivity in this important industry for the region.

On the floating bases (fish factories) of "Kraboflot" exclusively women worked, processing crabs delivered by fishing vessels, where exclusively men worked. Our sociological team encountered problems that no one expected. It turned out that in women's collectives all female workers synchronise their menstrual cycle after a short time. Working on crab processing factory is physically demanding, so during the critical days common to all women's teams, labour productivity dropped noticeably. The male miners were indifferent to this — they delivered the same amount of crab as always.

The "Kraboflot" management accepted our proposals for a short-term reduction in crab catches, albeit begrudgingly. For this purpose, we had to find an adequate woman among the instructors of the Regional Committee of the Communist Party of the Soviet Union. However, it was not without warnings about inadmissibility of such measures in a planned economy. The plan for fishing vessels in critical days began to be officially reduced. Later, I had to contact and exchange experience with sociologists from Ivanovo, where similar problems were faced by textile enterprises.

Now, when I look at the work of Claudia Goldin, Nobel Laureate in Economics 2023, I begin to realise how lucky I was to have encountered the laboratory version of the problems she was working on. But Laureate was also studying aspects of the problems we hadn't gotten to: what the transition to new labour conditions would cost.

[3] More precisely, "vignette" means to highlight some part of a photograph (such as its centre) by artificially increasing its brightness. So, the term is very accurate, although it does not lend itself to direct translation.

After this slightly exotic "vignette" example, we can move on to trying to answer the next question:

IS THERE A "NATURAL LEVEL" OF WOMEN'S PARTICIPATION IN THE ECONOMY?

The proportion of working women changes over time. Claudia Goldin wondered whether there is a level of female employment that can be called natural, similar to the unemployment rate, which is considered natural if it is within 3–4 per cent of the working-age population.

The proportion of women in full-time employment is not currently (since 1990) increasing (although it had been increasing for almost a hundred years before that). This applies to women of any age, with any level of education, both married and unmarried. For example, employed married women who are college graduates in their 30s have been 76% since 1990. Is it possible that this is the "natural participation of women in the economy"?

This is a hasty conclusion, since the general development of the economy must be taken into account: when the economy is booming, the proportion of employed women increases, while in a downturn it decreases.

The reason why the data do not support the concept of the natural rate of female employment is also due to changes in demography. With the increase in the age of marriage and the delay in having a first child, women in their 30s are now more likely to have a child under the age of 6 than they were a quarter of a century ago. Despite increasing childcare burdens, employment of women over 30 is higher today than in the early 1980s and much higher than in the 1960s. In 1965, only 40 per cent of the employed were women, of whom 57 per cent had children under 6 years of age. Until 1999, the proportion of women in employment increased at about the same rate as the proportion of mothers with preschool children among working women. After that, the increase stopped. Most likely, these two overlapping processes suggest that women worked and were educated before the age of 30 and had their first child when they already had labour experience.

Thus, it is clear from Claudia Goldin's research that there is hardly a once and for all "natural rate" of women's employment. Women's labour serves as a buffer through which total employment adjusts to fluctuations in economic growth.

FEMALE LABOUR AND THE PANDEMIC

The coronavirus epidemic was seen by Claudia Goldin as a natural experiment, the expected result of which would be a reduction in the number of working women as the quarantine and school and nursery closures increased the burden on them in the household.

C. Goldin pointed out, first of all, that during the pandemic it became more evident than ever before in the history of the United States: the economic development of the United States was radically dependent on women's labour.

The pandemic has put real pressures on women and families that should not be ignored. But this impact has been significantly different from what was expected. In the US, the number of working women with college graduates and children under age 4 in spring 2021 was even slightly higher than in spring 2018, while roughly the same proportion of mothers with children of similar age had their work status downgraded. They "chose to stay at work" despite the demotion and increased burden of caring for children and elderly relatives because work brings a sense of security in the face of unreliable future earnings.

At the same time, women who had not graduated from college were twice as likely to quit their jobs during the pandemic as those with a college degree. This was partly due to the fact that the latter had more opportunities to work remotely.

In addition, C. Goldin noted a surge in activity in the US of organisations that can reduce the burden on women in the family: after-school groups, sports clubs, home-delivered meals, and so on. This indicates an increased demand for such services and a willingness to pay more for them. The demand for all kinds of additional education

has also increased: legal, accounting, etc., which expands opportunities to work remotely without losing part of their earnings.

The researcher's general conclusion is that for many, getting married and having children means increased stability. For this reason, the coronavirus pandemic did not reduce marriage rates or shift working mothers to solely family responsibilities.

Compared to other downturns in the global economy, the coronavirus epidemic has affected working women more than men. But it is not possible to unequivocally assess differences in the proportions who left work. The ability to reconcile family care and continue working varies significantly by education, location, and skin colour. The more educated have more opportunities to work from home. Those who provide services that require face-to-face contact, however, have had to leave. African-American women, who were not very good at their jobs before the pandemic, saw the coronavirus as a good reason to leave them.

Real-life cases of decision-making by working women after the outbreak of the coronavirus epidemic show that they experienced high levels of stress when their children were in school, their grown-up daughters were working, and their parents needed constant care. But even such women did not always make the decision to leave their jobs [21].

It is interesting that studies as close as possible to those conducted by C. Goldin were carried out in Russia by scientists from the Academy of National Economy, but there is nothing in them concerning the economy or attitudes to labour. It is simply noted that there are more permanent partners and fewer casual connections [22]. Such studies are also needed, but it is unlikely that they will win an economics prize. However, these results do not contradict, but rather complement the conclusions made by Claudia Goldin.

CONCLUSIONS

The author has the feeling that this article does not fully reflect the personal contribution of Professor Claudia Goldin, for which she, in fairness and rightly, won the Nobel Prize in Economics. But it so happens that the very problems to which her research is devoted are poorly known to the domestic reader. But, if you wish, you can turn to the original source.

REFERENCES

1. Goldin C., Glaeser E.L., eds. Corruption and reform: Lessons from America's economic history. Chicago, IL; London: University of Chicago Press; 2006. 396 p. (National Bureau of Economic Research Conference Report).
2. Lenin V.I. Complete set of works. Vol. 42. Moscow: Politizdat; 1970. 606 p. (In Russ.).
3. Douglas M. Purity and danger: An analysis of concepts of pollution and taboo. London: Routledge and Kegan Paul Ltd.; 1966. 244 p.
4. Goldin C. A pollution theory of discrimination: Male and female differences in occupations and earnings. NBER Working Paper. 2002;(8985). URL: https://scholar.harvard.edu/files/goldin/files/a_pollution_theory_of_discrimination_male_and_female_occupations_and_earnings.pdf
5. Milgrom P., Oster S. Job discrimination, market forces and the invisibility hypothesis. *The Quarterly Journal of Economics.* 1987;102(3):453–476. DOI: 10.2307/1884213
6. Lundberg S.J., Startz R. Private discrimination and social intervention in competitive labor markets. *The American Economic Review.* 1983;73(3):340–347.
7. Lang K. A language theory of discrimination. *The Quarterly Journal of Economics.* 1986;101(2):363–382. DOI: 10.2307/1891120
8. Breckinridge S.P. Legislative control of women's work. *Journal of Political Economy.* 1906;14(2):107–109. DOI: 10.1086/251197
9. Goldin C.D. The role of World War II in the rise of women's employment. *The American Economic Review.* 1991;81(4):741–756.

10. Blau F.D., Winkler A.E. The economics of women, men and work. Oxford; New York, NY: Oxford University Press; 2017. 560 p.
11. Goldin C. A grand gender convergence: Its last chapter. *The American Economic Review*. 2014;104(4):1091–1119. DOI: 10.1257/aer.104.4.1091
12. Goldin C., Katz L.F. Career and marriage in the age of the pill. *The American Economic Review.* 2000;90(2):461–465. DOI: 10.1257/aer.90.2.461
13. Akerlof G.A., Yellen J.L., Katz M.L. An analysis of out-of-wedlock childbearing in the United States. *The Quarterly Journal of Economics.* 1996;111(2):277–317. DOI: 10.2307/2946680
14. Walker P.J. Time traveler. Finance & Development. 2018;(Dec.):41–43. URL: https://www.imf.org/en/Publications/fandd/issues/2018/12/profile-of-harvard-economist-claudia-goldin
15. Goldin C.A. Hours flexibility and the gender gap in pay. Washington, DC: Center for American Progress; 2015. 31 p. URL: https://scholar.harvard.edu/files/goldin/files/goldin_equalpay-cap.pdf
16. Lundberg S., Pollak R.A. Bargaining and distribution in marriage. *Journal of Economic Perspectives*. 1996;10(4):139–158. DOI: 10.1257/jep.10.4.139
17. McElroy M.B., Horney M.J. Nash-bargained household decisions: Toward a generalization of the theory of demand. *International Economic Review.* 1981;22(2):333–349. DOI: 10.2307/2526280
18. Goldin C., Katz L.F., Kuziemko I. The homecoming of American college women: The reversal of the college gender gap. *Journal of Economic Perspectives.* 2006;20(4):133–156. DOI: 10.1257/jep.20.4.133
19. Goldin C., Katz L.F. A most egalitarian profession: Pharmacy and the evolution of a family-friendly occupation. *Journal of Labor Economics.* 2016;34(3):705–746. DOI: 10.1086/685505
20. Goldin C., Katz L.F. The cost of workplace flexibility for high-powered professionals. The Annals of the American Academy of Political and Social Science. 2011;(638):45–67. DOI: 10.1177/0002716211414398
21. Goldin C. Understanding the economic impact of COVID-19 on women. NBER Working Paper. 2022;(29974). URL: https://www.nber.org/system/files/working_papers/w29974/w29974.pdf
22. Solodovnikova O.B., Manuil'skaya K.M., Rogozin D.M. Sexual behavior of Russians of all ages during the COVID-19 pandemic. *A Person.* 2021;32(4):27–52. (In Russ.). DOI: 10.31857/S 023620070016684–9

ABOUT THE AUTHOR

Yuri P. Voronov — Cand. Sci. (Econ.), leading researcher at the Institute of Economics and Industrial Engineering, Siberian Branch of the Russian Academy of Sciences, Moscow, Russia
https://orcid.org/0000-0002-7835-5827
corpus-cons@ngs.ru

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 10.11.2023; revised on 29.11.2023 and accepted for publication on 14.12.2023. The author read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-69-79
UDC 339.721,339.748,339.98(045)
JEL F02, F31, F33, F51, G01

Currency Hegemony as a Tool of US Global Dominance

A.V. Kuznetsov
Financial University, Moscow, Russia

ABSTRACT

Subject. The formation of new centers of global influence predetermines corresponding changes in the global balance of power. At the same time, the lack of real reforms of the global monetary system allows the United States to continue to set the rules of the game in the global economy, despite its increasing crisis potential. In this regard, there is a need to identify the driving forces capable of producing constructive changes in the global monetary order. **Objective.** A summary of the practice of using the US dollar to suppress global competition and maintain American superiority in international economic relations. **Results.** The control of the international monetary sphere by the country — hegemon of the world economy can be traced at all stages of the development of international economic relations (IER). Currently, the hegemonic country's self-interest from issuing international liquidity, with non-resistance to such a policy on the part of all other IER participants, hinders the development of effective anti-crisis measures and worsens the general condition of the world economy. Scattered attempts to overcome the failures of global currency regulation at the local level (including through the use of digital technologies) seem to be ineffective, since they are not systemic in nature. **Conclusions.** A qualitative reform of the global monetary system is impossible without combining the efforts of the world's largest economies to counter the destructive policies of the country that issues key international liquidity. Otherwise, the costs of financial crises become an insurmountable obstacle to the global economy entering a path of sustainable development.

Keywords: international liquidity; reserve asset; foreign debt; currency standard; purchasing power; international price benchmark; currency wars; digital currencies

For citation: **Kuznetsov A.V. Currency hegemony as a tool of US global dominance. *The World of New Economy*. 2024;18(1): 69-79. DOI: 10.26794/2220-6469-2024-18-1-69-79**

INTRODUCTION

Leadership in the world economy has been accompanied by the establishment of control over the sphere of international monetary circulation since ancient times. The technique of binding countries through international liquidity was known in the pre-Christian era, when in the vast territories of the Persian, Macedonian and Roman empires circulated the first "world" money in the form of gold coins, embodying the power of the then conquerors. The British Empire borrowed much from the Romans in terms of organising its own monetary system [1, p. 35], which was the first to put into practice the idea of a "reserve asset", with the help of which it became possible to settle mutual claims and obligations between participants in foreign economic activity. The binding of the reserve asset to the currency of the country — the hegemon of the world economy — secured the status of the first world reserve currency for the pound sterling within the framework of the gold standard, endowing Britain with an exorbitant privilege to service its debt obligations to the outside world in its own currency [2]. To this day, most of the British foreign debt is denominated in pound sterling [3, p. 416], including outstanding debt obligations to former colonies.

Meanwhile, Britain's inability to timely abandon its superiority in the international monetary sphere after the loss of leadership in the world economy in the late 19th century led to two world wars, the Great Depression and the destruction of the world trade system based on the gold standard.

The USA as the new leader of the world economy reproduced in the post-war monetary order practically all the elements of the previous "English" monetary standard with the only difference that the US dollar was adopted as the world money, and the Bank of England as the institutional basis of the world monetary system was replaced by the International Monetary Fund, formally represented by sovereign states, but actually dependent on the US Federal Reserve System as the exclusive supplier of dollar international liquidity to the world market.

Despite the consistent erosion of the American-centric monetary order, expressed in the increasing frequency of economic crises, growing socio-economic polarisation and geopolitical tensions, the end of 80 years of global hegemony of the dollar is not quite certain. The likelihood of maintaining the status quo is largely due to the manifestations of financial opportunism, network effects and the "indispensability" of the US currency for the private and public sectors as a means of saving and adding value, stemming from the innovative potential and huge size of the US capital market [4].

The inseparable relationship between the US dollar hegemony and American global dominance has been discussed in numerous academic publications [5–13]. This study focuses on the facts of using the US dollar to weaken the economic potential of global competitors in the absence of consolidated opposition from the latter to the voluntaristic policy of the country — the issuer of key international liquidity.

THE CONTROVERSIES OF THE DOLLAR AS A WORLD CURRENCY

The fundamental difference between the modern US dollar and the 19th century pound sterling is that its intrinsic and extrinsic value are not identical. During the gold standard, there was no difference between the purchasing power of money and its exchange rate, which were equally expressed in gold. Today, the gold equivalent purchasing power of the dollar has been devalued many times over. Whereas an ounce of gold (31.1 g) was worth $ 35 before 15 August 1971, today it is worth more than $ 2,000. At the same time, the external value of the dollar (its exchange rate) remains virtually unchanged. This is due to the fact that there are direct quotations on the international currency market, in which a certain amount of foreign currency is equated to a dollar unit.[1] In addition, the dollar acts as a price benchmark for all strategic resources traded on major commodity exchanges.

[1] The only exceptions are the euro, pound sterling, Australian and New Zealand dollars, for which reverse quotes apply.

The dollar's function as an international price benchmark overvalues it against all other currencies. This revaluation is most evident when comparing the GDP of countries expressed in market (dollar) prices and purchasing power parities. The revaluation of the dollar is reflected in the permanent decline in the relative level of well-being not only in developing countries but also in developed countries. For example, per capita income in Japan as a percentage of per capita income in the US (expressed in current dollars) fell from 128.4 to 44.3 per cent between 1996 and 2022, in Germany it fell from 102.3 to 63.7 per cent, and in the UK, it fell from 81.3 to 59.3 per cent.[2]

The current international monetary standard forces all other countries to permanently adapt their own monetary, exchange rate and macroeconomic policies, as well as the structure of production and exports to the national interests of the United States as the issuing country of the key reserve currency, while bearing the main costs of insuring currency and liquidity risks, which leads to non-equivalent exchange and reproduction of global imbalances.

This adaptation is exemplified by the so-called "currency wars" of 1985–1990 and 2002–2008, when the real effective exchange rate of the dollar fell by 60 per cent and 35 per cent respectively.[3]

The first large-scale devaluation of the dollar began after the Plaza Agreement (1985). In the 1980s, Japan began to actively push the US out of the world market, taking leading positions in key industries — from shipbuilding to integrated circuit production. Japanese credit institutions held 8 places in the world's top ten banks in terms of deposits. Among the 25 largest banks in the world in terms of assets, 17 were Japanese [14]. In 1987, the USA gave way to Japan in terms of stock market capitalisation. The Bank of Japan was the largest investor in high-yield debt obligations of the U.S. Treasury, at the expense of which the U.S. financed imports from Japan. To counteract the global Japanese expansion and prevent the collapse of the dollar pyramid, in 1985, together with other leading industrialised countries, the US implemented concerted currency interventions aimed at strengthening the value of the yen. As a result, the exchange rate of the Japanese monetary unit appreciated from 261 yen per dollar in March 1985 to 121 yen per dollar in November 1988, resulting in a loss of competitive advantage for Japanese exporters in the world market. The bursting of the Japanese stock market bubble in 1990 marked the era of the "lost decades", when Japan's economic growth began to be financed mainly by a forced build-up of public debt (*Fig. 1*).

The Japanese financial crisis was a prerequisite for the Asian financial crisis of 1997–1998, which led to a $ 2 trillion decline in world GDP and a subsequent progressive increase in the demand for international reserves. Thus, between 1999 and 2021, the demand for dollars as a reserve asset was three times greater than the demand for euros: in absolute terms, dollar reserves grew by $ 6.2 trillion, while euro reserves grew by $ 2.2 trillion.[4] (*Fig. 2*).

The second devaluation of the dollar, which began immediately after the introduction of euro cash, was caused by the pumping of liquidity into the US economy after the Federal Reserve's sharp cut in the interest rate to 1 per cent in June 2003. As a result, the exchange rate of the single European monetary unit appreciated from 1.16 in January 2002 to 0.63 euro per dollar in July 2008. The devaluation of the US dollar against the euro has created significant problems in adapting the structurally heterogeneous members of the Eurozone to the new conditions of foreign trade, which provoked a balance of payments crisis in the EU. Before joining the Economic and Monetary Union, the international competitiveness of countries such as Greece, Portugal, Spain and Italy was ensured by periodic devaluations of their national currencies. However, the rejection of national currencies by the countries of the EU Mediterranean periphery and their inability to unilaterally influence the exchange rate of the appreciating euro led

[2] URL: https://www.imf.org/en/Publications/WEO/weo-database/2023/April (accessed on 18.01.2024).

[3] URL: https://www.imf.org/ru/Publications/WEO/Issues/2022/10/11/world-economic-outlook-october-2022 (accessed on 22.03.2023).

[4] URL: https://data.imf.org/?sk=E 6A5F467-C 14B-4AA8–9F6D-5A09EC 4E 62A4 (accessed on 12.02.2024).

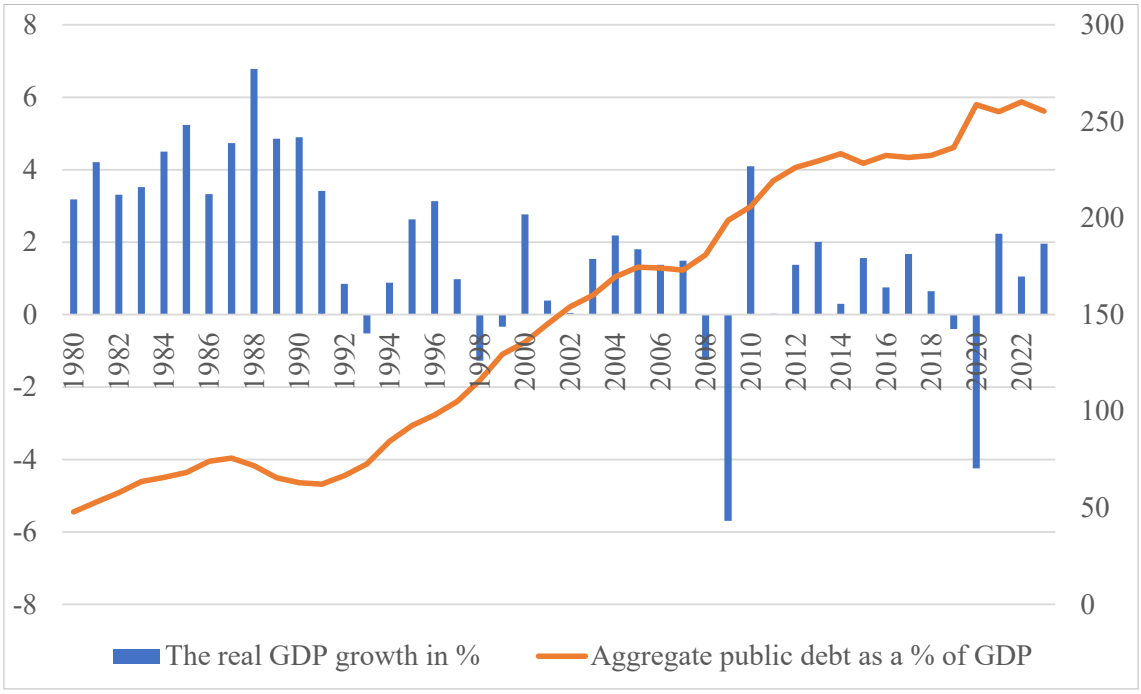

Fig. 1. **Dynamics of economic growth and the size of public debt in Japan in 1980–2023**

Source: compiled according to the data of IMF. URL: https://www.imf.org/en/Publications/WEO/weo-database/2023/October

to a sharp increase in their current account deficit (*Fig. 3*), the repayment of which required an active build-up of external debt obligations.

The result of this policy was the debt crisis, for the resolution of which the EU first turned to the IMF and then to the US Federal Reserve. Between 2007 and 2010 alone, the total dollar liquidity provided to the ECB by the US Fed totalled $ 8.0 trillion.[5] Thus, the devaluation of the US dollar and the generated mortgage crisis destabilised the development of the common European economic and monetary space and led to a significant outflow of capital from the Eurozone, the deficit of which is still covered by dollar swap lines between the Fed and the European Central Bank.[6]

So, the sharp change in the value of the US dollar as world money has weakened the global positions of the main US competitors — Japan and the EU. According to WTO data, Japan's share in world exports between 1993 and 2022 fell from 9.8 to 3.1 per cent, the EU's — from 45.3 to 35.8 per cent.[7] The average annual real GDP growth rate in Japan between 1980 and 1991 was 4.3 per cent compared to 0.8 per cent between 1992 and 2014. In the Eurozone countries, GDP growth was 2.7 per cent between 1994 and 2001, and slowed to 0.9 per cent between 2005 and 2014 (*Fig. 4*).

The pumping of dollar liquidity into the global economy, primarily associated with the redemption of illiquid assets of US corporations, manifested itself in 2022 in double-digit inflation rates, to combat which the US Federal Reserve System sharply increased the interest rate. The tightening of the monetary policy of the US regulator materialised in large defaults in the US banking sector. Thus, in March — May 2023, the bankruptcy of three U.S. banks could have escalated into a crisis of the global finan-

[5] URL: https://www.gao.gov/products/gao-11–696 (accessed on 22.03.2023).

[6] URL: https://www.ecb.europa.eu/mopo/implement/liquidity_lines/html/index.en.html (accessed on 10.02.2024).

[7] URL: https://www.wto.org/english/res_e/statis_e/wts_e.htm (accessed on 28.02.2024).

cial market, if it had not been for the extraordinary intervention of the Fed, which on 15 March 2023 provided a record for the entire history of refinancing in the amount of $ 153 billion. [15, p. 34].

The second "side effect" of the increase in the global dollar supply was the growing U.S. government debt. The author of the original concept of hard-to-predict rare events in financial markets N. Taleb compared the growing US debt burden

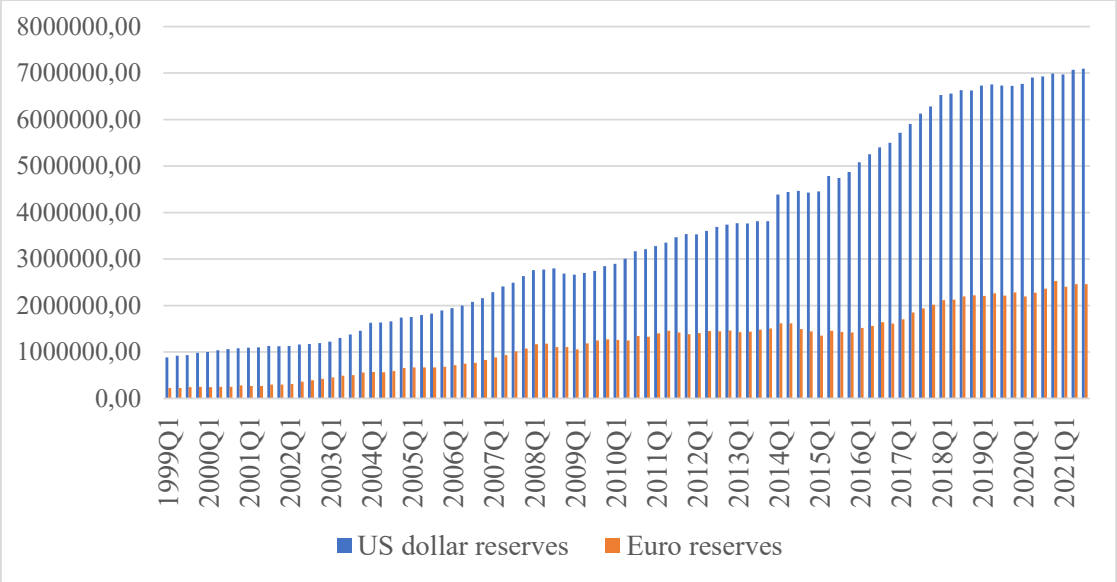

Fig. 2. **Dynamics of growth of international reserves denominated in US dollars and euros in the period 1999–2021, million US dollars**

Source: compiled according to the data of IMF. URL: https://data.imf.org/?sk=e6a5f467-c14b-4aa8-9f6d-5a09ec4e62a4

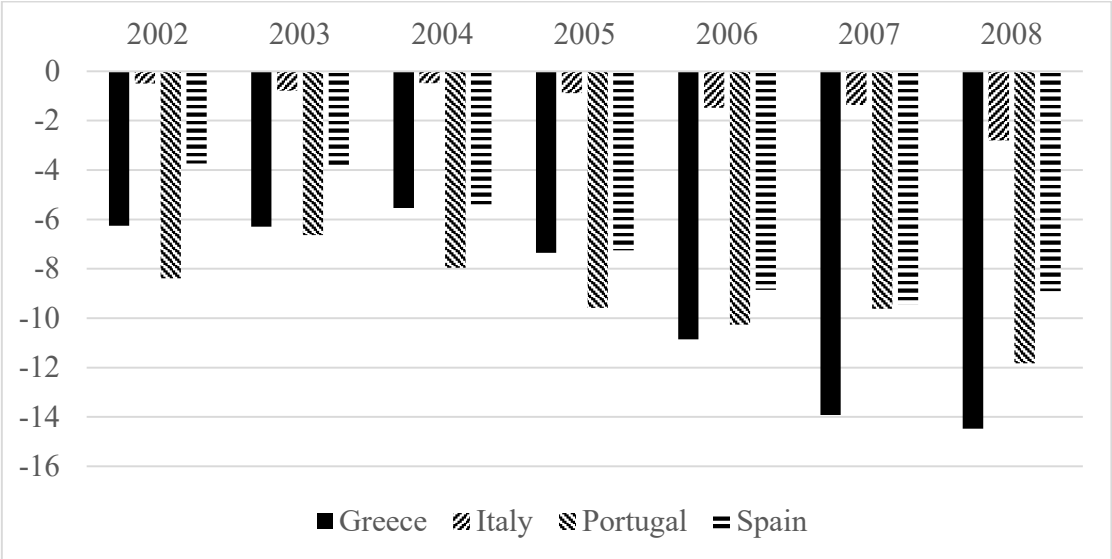

Fig. 3. **Dynamics of the current account balance of the Eurozone peripheral countries in 2002–2008, as a percentage of GDP**

Source: compiled according to the data of IMF. URL: https://www.imf.org/en/Publications/WEO/weo-database/2023/October

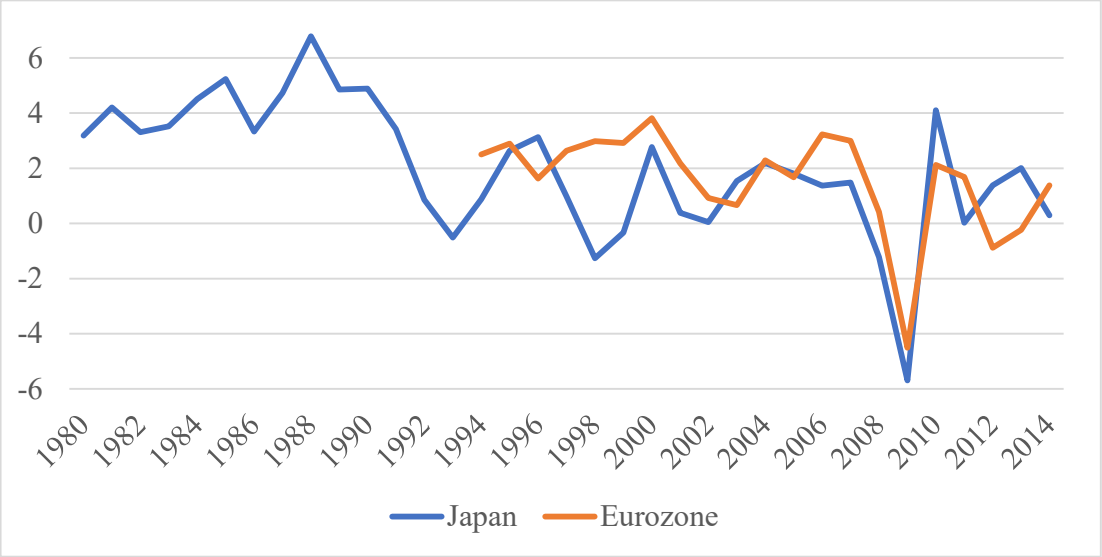

Fig. 4. **GDP growth rates in Japan and the Eurozone in 1980–2014, %**

Source: compiled according to the data of IMF. URL: https://www.imf.org/en/Publications/WEO/weo-database/2023/October

to a "white swan", i.e., a risk, the occurrence of which is more likely than an unexpected event of a "black swan".[8]

As global debt increases, the risk of sovereign default increases not only for the US, but also for developing countries, whose debt structure has traditionally been dominated by the US currency. A debt crisis could trigger disruptions in global supply chains and lead to another spike in inflation. Capital outflows from developing countries strengthen the exchange rate of the U.S. dollar and reduce the competitiveness of U.S. manufacturers. To counter the expansion of competitors in foreign and domestic markets, the United States wages currency and trade wars that destabilise fuel, commodities, and energy markets. Together, these factors necessitate the creation of alternative international liquidity.

A FUTURE WITHOUT THE DOLLAR

The modern architecture of world finance is under increasing pressure, firstly, from the United States, seeking to maintain financial power in the emerging multipolar world, and secondly, from the most dynamically developing countries, objectively claiming parity in the distribution of benefits and costs of economic and financial globalisation.

The pronounced crisisogenicity of the world economy against the background of the increasing global importance of the Eastern countries and the development of digital technologies requires a change in the current international monetary standard.

Meanwhile, the inability of the rest of the world to abandon the dollar as world money and to offer a viable alternative to the existing international liquidity, apparently, means that only the United States itself, through its aggressive foreign policy, will force countries to gradually abandon the dollar and switch to alternative means of international settlements and payments.

It is obvious that the excellent qualities of the dollar as world money today are supported not so much by the United States' own economic potential, whose successes throughout history have depended on the inflow of talents and resources from the rest of the world, as by the skilful work of political technologists and image-makers, as well as Wall Street financiers and Silicon Valley programmers, who at the present stage, in fact, have

[8] URL: https://www.bloomberg.com/news/articles/2024–01–30/nassim-taleb-says-us-faces-a-death-spiral-of-swelling-debt (accessed on 09.02.2024).

substituted the implementation of real reforms of the world monetary system with the introduction of increasingly sophisticated financial and technological innovations.

The global financial crisis and the Covid crisis confirmed the increasing dysfunctionality of the current monetary standard with regard to the regulation of international monetary and financial relations and the resolution of acute global socio-economic problems, which led to the emergence and rapid development of the decentralised financial market (DeFi) operating on the basis of cryptocurrencies.

Market excitement around crypto-assets is helping to promote the idea of launching sovereign digital currencies, which could bring significant adjustments to the credit money-based growth model. In practice, however, the future of cryptoisation of global finance looks uncertain. For example, the creators of the global cryptocurrency private money project Diem (originally Libra) had to abandon its implementation, and its related assets were sold under pressure from the Fed to Silvergate Bank, which went bankrupt in March 2023.[9] The official White House position on crypto-assets was unequivocally articulated in the President's annual address to the U.S. Congress in March 2023, which noted, in particular: "While digital technologies are a clever solution to the problem of executing transactions without a trusted party, crypto-assets do not currently provide widespread economic benefits. They are mainly speculative investment instruments and are not an effective alternative to fiat currency".[10] In the view of H. Waller, a member of the Board of Governors of the Federal Reserve System, the digital dollar could do more harm than good to the U.S. financial system, including cyber threats and disintermediation of commercial banks. In his opinion, neither the digital dollar nor the digital currency of another central bank will help to overcome the existing differences in the sphere of international payments without violating international standards of financial reporting (IFRS).[11]

Meanwhile, Asian, and European central banks are joining their efforts to create international payment and settlement systems based on their own digital currencies. Pilot tests of such projects (e.g., Mariana, Dunbar, mBridge, Icebreaker) are being conducted at the Innovation Hub of the Bank for International Settlements, which has offices in London, Stockholm, Singapore, Hong Kong, Paris, and Frankfurt.[12] Despite the achievement of certain positive results of testing, expressed in the increased speed and reduced cost of cross-border payments, there remain a large number of unresolved contradictions related to the problems of privacy, accessibility, cybersecurity and divergence in regulatory approaches and principles at the level of individual jurisdictions [16, p. 49]. The use of proprietary technologies, standards, and protocols by central banks to handle digital currencies means fragmentation of the central bank digital currency ecosystem [17]. On the other hand, the creation of a universal multi-platform CBDC regulated by the unified norms of international law puts it in a long-term dependence on Anglo-American law firms, which actually monopolised the servicing of transactions in the global financial market.

The second most significant challenge to the US dollar as a global currency is the unprecedented seizure of over $ 300 billion in Russian reserve assets, which could have far-reaching consequences for the US dollar as a reserve and international settlement currency. The imposition of an embargo on reserve assets multiplies the risks of under-receipt of foreign currency proceeds for the supply of goods and services by participants in international trade.

As early as 1944, the IMF's Articles of Agreement stipulated that 75 per cent of a member

[9] URL: https://www.bloomberg.com/news/articles/2022–01–31/meta-backed-diem-association-confirms-asset-sale-to-silvergate (accessed on 12.02.2024).

[10] URL: https://www.whitehouse.gov/wp-content/uploads/2023/03/ERP-2023.pdf (accessed on 12.02.2024).

[11] URL: https://www.federalreserve.gov/newsevents/speech/waller20221014a.htm (accessed on 12.02.2024).

[12] URL: https://www.bis.org/press/p221102.htm (accessed on 12.02.2024).

country's share in the capital of the Fund should be paid in its national currency. This provision is still in force today. In practice, it means, for example, that it is quite realistic to pay for Russian gas supplies in roubles. For this purpose, importers of Russian blue fuel need only to use the mechanism of correspondent accounts specially created for this purpose, demanding that the IMF should unfreeze its rouble holdings [18].

The precedent with the confiscation of Russian foreign assets may be repeated with respect to any other participant of the international trading system that shows disloyalty to the US foreign policy. Therefore, the IMF member countries should demand that the Fund take measures against the voluntaristic actions of the US and its allies, and put back on the agenda the priority use of national currencies in the settlement of mutual financial claims and obligations in order to restore the status of the world monetary system as a mechanism for multilateral settlements with real, not declarative, use of an unlimited number of national currencies.

The seizure of Russian assets has already led to a number of initiatives to move away from the dollar as the currency of international settlements, for example, the China-Brazil agreement reached in March 2023 to settle bilateral foreign trade transactions in local currencies; the beginning of the use of the Indian rupee to settle certain transactions between India and Malaysia, as well as Sri Lanka, Bangladesh, Egypt, Russia, several African and Persian Gulf countries; the completion of the first liquefied natural gas sale to a Chinese national oil company CNOOC and France's TotalEnergies in Chinese yuan (CNY) through the Shanghai Petroleum and Natural Gas Exchange; Russia's foreign trade settlements in Chinese yuan not only with China, but also with countries in Africa, Asia and Latin America; Saudi Arabia, the main US outpost in the global oil market, is considering the possibility of selling oil for yuan instead of the US dollar, etc.

The pace of dedollarisation of the global economy depends to a large extent on the future development of economic relations between Russia and the European Union. The reduction of Russia's share in the EU's foreign trade balance increases the EU's costs in two main areas: the loss of a source of relatively cheap energy resources and the loss of a geographically close market for the products of its manufacturers.

Although Russia's position towards the EU has so far remained more than loyal, given the 13 sanctions packages against Russia, the persistence of European politicians in worsening relations with Moscow could eventually have a very negative impact on the revenues of European companies and citizens.

Another gas storage utilisation problem, which the EU could face as early as winter 2024/2025, could trigger a very serious crisis, the consequences of which could be mitigated if the EU countries were to build up their foreign exchange reserves in roubles to pay for future gas supplies from Russia. The EU could provide the necessary rouble liquidity by creating a net trade surplus with Russia by settling exports of European goods to the Russian market in roubles. The EU could use a similar scheme in trade with China, for example, to replenish the stock of rare earth metals needed for the production of solar panels, wind turbines and electric cars and to fulfil its plans to move towards a carbon-neutral economy.

The formation of a reserve "cushion" in yuan and roubles would help diversify the EU's foreign exchange reserves and reduce dependence on New York and London to finance the dollar deficit of the balance of payments. Such diversification could also contribute to the implementation of the EU's course towards strategic autonomy, which implies the creation of its own independent financial markets where transactions in Russian roubles and Chinese yuan could take place (in the latter case, only London has such a prerogative in the European space so far). In turn, for Russia and China, such a step on the part of the EU would mean a real advancement of plans to internationalise their national currencies.

Similarly, settlements on foreign economic transactions with other countries friendly to Russia and China could be organised in a similar way. For example, Russia could pay for imports from African, Asian, and Middle Eastern countries in roubles (yuan) without fear of secondary sanctions, and these countries, in turn, could use roubles (yuan) to pay for imports from Russian producers. However, this requires the creation of an independent settlement and payment circuit to pre-empt the intermediate conversion of yuan and roubles into dollars using Western-controlled settlement infrastructure (SWIFT, CLS).

These signals may prompt the US to take action to modernise the current currency standard. However, by the time American conservative financial circles decide to undertake such a transformation, Russia and China will have already formed their own system of cross-border payments in roubles and yuan, which will serve as the best guarantee against future financial shocks.

Despite the current geopolitical tensions between the EU and Russia, the possibility of forming a European liquidity buffer in Chinese yuan and Russian roubles does not seem quite utopian, given the rising degree of domestic political and economic tensions in major European countries, particularly in Germany, France, and Italy. Meanwhile, the actual implementation of this unconventional approach depends on combining the subtlety of diplomatic art with financial innovation and political wisdom, as well as on further developments on the European continent.

CONCLUSIONS

The global leadership of the United States after World War II is largely due to the privileged role of the dollar in the world monetary system. The non-resistance to this fact on the part of other leading economies of the world has created an illusory perception of its exclusivity, which gives the US the right to receive financial rent from all other countries as a payment for the use of the American monetary unit for international settlements, payments, savings, and investments.

A closed circle of financial obligations was formed in 1944 at the Bretton Woods Conference, when 44 participating countries supported H.D. White's plan to create a new world monetary order with the US dollar at its centre. None of the conference participants objected to the American plan, although in the run-up to the conference an alternative British project to create supranational money, in the issue of which a wide range of countries were supposed to participate, was discussed in expert circles. Subsequently, some elements of the British "alternative" were reproduced within the framework of the multilateral international settlement mechanism of the Council for Mutual Economic Assistance (CMEA). Despite the achievement of significant results in smoothing the imbalances of socio-economic development, the experience of the convertible rouble circulation within the CMEA was not transferred to the global level.

With the abolition of dollar convertibility into gold in 1971, the world community had another chance to free itself from dependence on the US as a solo issuer of world money and switch to the use of SDRs, the collective settlement and reserve liquidity created on the basis of the IMF in 1969. All developed countries, including the member states of the European Economic Community and Japan with large trade surpluses, refused to use SDRs as full-fledged world money. None of the significant IMF shareholders agreed to commit to redistribute excess international liquidity in favour of countries with balance of payments deficits. This passive attitude to the reform of the world monetary system automatically preserved the dollar's status as the world's key currency.

During the oil crises of the 1970s, the US and OPEC countries reached a tacit agreement to convert all contract prices for oil into dollars, with a subsequent transition to exchange pricing in the markets of strategic commodities. These informal agreements were never challenged by the international community, and as a result, the dollar was finally consolidated in the status of a virtually non-alternative benchmark of world commodity prices.

In turn, the role of the US currency as a reserve asset was strengthened by the Asian financial crisis of 1997–1998, which hit fast-growing East Asian economies whose currencies were pegged to the US dollar the hardest. After the crisis, these economies began to actively build up dollar reserves to protect themselves against future shocks. To this day, Asia-Pacific countries are the largest holders of dollar reserves.

Each of the above-mentioned crises only strengthened the US confidence in the stability of its position. The sense of impunity was very clearly manifested in the mid-1980s, when the US currency war against its strategic partner Japan plunged the "Land of the Rising Sun" into a state of "lost decades". Paradoxically, the Bank of Japan was directly involved in coordinated currency interventions aimed at appreciating the yen. Similarly, the euro appreciation game in the noughties weakened the international competitiveness of European companies. However, even these US demarches against its political allies were not reciprocated. Such amorphousness finally unleashed the White House, which dared to freeze the seventh largest international reserves in the world of the Bank of Russia, indisputably violating the fundamental principles of the Jamaican monetary system.

Thus, the privilege of issuing a key reserve currency serves as a powerful tool for consolidating global leadership. However, the opposite is also evident — without dominance in the world monetary system, it is impossible to project its power on a global scale. This is confirmed by the minor role of the EU, China, Russia, and India in establishing the global rules of the game, despite the fact that these key IER actors have, respectively, the largest "common market", the largest industrial production, the largest military potential and the largest population in the world.

So, the lack of reforms of the current international monetary standard means the need to prepare the world community for new even more devastating crises. Expanding the use of national currencies, CBDCs and crypto-assets in international settlements will not solve the problem of regulating final settlements between countries and displacing the U.S. dollar, because in addition to the currencies themselves, a long period of their internationalisation — adaptation of economic agents around the world to accept substitutes for the U.S. dollar in settlements — is needed. Therefore, in order to accelerate the transformation of the current international monetary standard, it is necessary to combine the efforts of the EU, Japan, India, China and Russia in carrying out a real reform of the world monetary system aimed at increasing the international use of national currencies of IMF member countries in proportion to their contribution to the development of the world economy. Only in this way is it possible to ensure real, not declarative, conditions for sustainable, confident, secure, balanced, innovative and inclusive growth.

ACKNOWLEDGEMENTS

The article was prepared based on the results of research carried out at the expense of budget funds under the state assignment of the Financial University.

REFERENCES

1. Bernstein P.L. The power of gold: The history of an obsession. New York, London: John Wiley & Sons; 2001. 452 p. (Russ. ed.: Bernstein P.L. Vlast' zolota. Istoriya navazhdeniya. Moscow: Olymp-Business; 2004. 400 p.).
2. Van Hombeeck C.E. An exorbitant privilege in the first age of international financial integration? *Journal of International Money and Finance*. 2020;101:102092. DOI: 10.1016/j.jimonfin.2019.102092
3. Lomakin V.K. Economy of Britain. Moscow: MGIMO-University; 2016. 654 p. (In Russ.).
4. Kaltenbrunner A., Lysandrou P. The US dollar's continuing hegemony as an international currency: A double matrix analysis. *Development and Change*. 2017;48(4):663–691. DOI: 10.1111/dech.12318

5. Eichengreen B. Exorbitant privilege: The rise and fall of the dollar and the future of the international monetary system. Oxford: Oxford University Press; 2011. 226 p.
6. Vermeiren M. The crisis of US monetary hegemony and global economic adjustment. *Globalizations*. 2013;10(2):245–259. DOI: 10.1080/14747731.2013.786247
7. Kirshner J. American power after the financial crisis. Ithaca, NY: Cornell University Press; 2014. 232 p.
8. Cohen B., Benney T. What does the international currency system really look like? *Review of International Political Economy*. 2014;21(5):1017–1041. DOI: 10.1080/09692290.2013.830980
9. Prasad E. The dollar trap: How the U.S dollar tightened its grip on global finance. Princeton, NJ: Princeton University Press; 2014. 440 p.
10. Winecoff W.K. Structural power and the global financial crisis: A network analytical approach. *Business and Politics*. 2015;17(3):495–525. DOI: 10.1515/bap-2014–0050.
11. Hardie I., Maxfield S. Atlas constrained: The US external balance and international monetary power. *Review of International Political Economy*. 2016;23(4):583–613. DOI: 10.1080/09692290.2016.1176587
12. Schwartz H.M. American hegemony: Intellectual property rights, dollar centrality, and infrastructural power. *Review of International Political Economy*. 2019;26(3):490–519. DOI: 10.1080/09692290.2019.1597754
13. Lim K. US monetary hegemony infrastructural linkages between states and markets. *The Korean Journal of International Studies*. 2023;21(3):383–408. DOI: 10.14731/kjis.2023.12.21.3.383
14. Zimenkov R.I. Conquistadors of the 20th century: Expansion of transnational corporations in developing countries. Moscow: Politizdat; 1990. 224 p. (In Russ.).
15. Ershov M.V. The world and Russia in the environment of transformation: Is the economic recovery sustainable? *Voprosy Ekonomiki = The issues of economics*. 2023;(12):31–47. (In Russ.). DOI: 10.32609/0042–8736–2023–12–31–47
16. Nesterov I.O. Central bank digital currencies: An innovative tool for enhancing domestic and cross-border payments and settlements. *Vestnik Sankt-Peterburgskogo universiteta. Ekonomika = St Petersburg University Journal of Economic Studies*. 2023;39(1):33–54. (In Russ.). DOI: 10.21638/spbu05.2023.102
17. Maslov A.V., Shvandar K.V. New international projects on the use of central bank digital currencies in transforming cross-border settlements. *Finansovyi zhurnal = Financial Journal*. 2023;15(2):47–58. (In Russ.). DOI: 10.31107/2075–1990–2023–2–47–58
18. Kuznetsov A.V. Russian ruble counterclaims. Russian Council on International Affairs. Mar. 25, 2022. URL: https://russiancouncil.ru/analytics-and-comments/columns/global-governance/rublevye-kontrtrebovaniya-rossii/ (In Russ.).

ABOUT THE AUTHOR

Aleksei V. Kuznetsov — Dr. Sci. (Econ.), Senior Researcher, Professor of Chair of world economy and world finance, Financial University, Moscow, Russia
https://orcid.org/0000-0003-3669-0667
kuznetsov0572@mail.ru

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 20.02.2024; revised on 10.03.2024 and accepted for publication on 31.03.2024. The author read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-80-92
UDC 314.7;339.9(045)
JEL F22, F24, J61

International Migration and Migration Policy Reforms

A.A. Tkachenko
Financial University, Moscow, Russia

ABSTRACT

The article examines the problems of regulating illegal migration by developed countries and the European Union, the achievements that cause not always correct criticism, and the possibilities of using the experience of a number of countries and new approaches in this regulation are shown. Particular attention is paid to international organizations dealing with the problems of international migration. It was concluded that there is no clear division of their functions by type of migration, which prevents the formation of long-term policies. Proposals were formulated to strengthen the role of the International Labour Organization (ILO) in rule-making and norm-setting on labor migration, which plays an increasingly important role in sustainable development. It was concluded that it is necessary to change the status of the migration conventions, otherwise effective regulation of labor migration is impossible. The countries of the Persian Gulf that attract external labor immigrants despite the rapid growth of the local population are highlighted. The difference in countries' policies towards labor migration in the 21st century compared to the 20th century is shown. The concept of "fiduciary duty" of federal governments in relation to external migration was introduced.

Keywords: international migration; migration policy; remittances; migration management and regulation; foreign labor force; migration corridors; illegal migration; irregular migration; convention on migration

For citation: **Tkachenko A.A. International migration and migration policy reforms.** ***The World of New Economy*****. 2024;18(1):80-92. DOI: 10.26794/2220-6469-2024-18-1-80-92**

INTRODUCTION

The world is facing a whole set of acute issues that have come to be called a polycrisis. Are migration issues among them? After all, there are both different points of view and a general consensus about it as a crisis phenomenon that threatens developed countries with an invasion of asylum seekers living off the social support system once they have been granted asylum. It would seem that the crisis is borne out by impressive figures that have a strong impact on the average person and are used by politicians to their advantage. There is even a shift in the policies of many European countries that has been labelled "ominous". Certainly, the figures for 2022 alone, showing a 64% increase in illegal border crossings in EU member states compared to 2021, are puzzling to say the least.[1] The figures for 2023 indicate the continued complexity of the situation.

Catastrophic events[2] favour mass emigration, with refugee numbers exceeding millions — these can be civil wars (Sudan, Syria), acute internal systemic crises (Venezuela) and even ethnic cleansing (Myanmar). In these cases, an important, if not the main role belongs to the UN and its international organisations, primarily the Agency and the Office of the United Nations High Commissioner for Refugees (UNHCR), whose main task is humanitarian assistance, although many countries send it directly to the affected areas. In the top five countries where the maximum number of refugees have settled, there is only one highly developed country — Germany (2.5 million people), whose policies in the 21st century have generally been more lenient than those of other European states. Pakistan (1.7 million), Colombia (2.5 million), Iran (3.4 million) and Turkey (3.6 million) are also in the top five. Obviously, these countries are neighbouring territories where extreme events have caused mass flight.

The number of forcibly displaced persons has doubled over the last decade, reaching 114 million in 2023, as a result of a doubling of armed conflicts, the highest number since the beginning of the 21st century. For 2023, the EU received more than 1 million asylum applications — 21.3% more than in 2022 (the largest increase since the 2016 migration crisis).[3]

It is quite expected that in the 21st century there are two main points of mass immigration — Western Europe and North America, which is caused not only by the level of their prosperity, but also by their territorial accessibility for the outflow of migrants from neighbouring countries. The most acute and controversial issue in the US in recent decades is the problem of illegal migration, addressing which the authorities seek to expand its legal avenues and enforce the law. Thus, the Biden government deported home about half a million people who had no legal status to stay in the US.[4]

Despite the fact that EU countries have generally emerged from the migration crisis, the issue remains very important not only for them, but also for the countries from where emigrants come to Europe, with a clear preference for those states with a higher level of social guarantees for migrants, including refugees. The World Bank (WB) presents the issue of migration as a phenomenon that is becoming increasingly necessary "for countries of all income levels".[5] This is confirmed in the United States, where "continued growth in immigration is the main driver of the country's modest population growth rate".[6] The same is true in a number of other highly developed countries.

[1] Migration Outlook 2023. Ten migration issues to look out for in 2023: Origins, key events and priorities for Europe. ICMPD, 2023. 35 p.

[2] What the UN (UN Refugee Agency) defines as events seriously disturbing public order (seriously disturbing public order).

[3] Migration Outlook 2024. Ten migration issues to look out for in 2024. ICMPD, 2024. 40 p.

[4] URL: https://www.nytimes.com/2023/03/01/us/undocumented-immigrants-exodus-us.html

[5] World Bank 2023. World Development Report 2023: Migrants, Refugees, and Societies. Washington, DC: International Bank for Reconstruction and Development. The World Bank; 2023. 318 + xxviii p.

[6] URL: https://www.brookings.edu/articles/immigration-is-driving-the-nations-modest-post-pandemic-population-growth-new-census-data-shows/?utm_campaign=Brookings%20Brief&utm_medium=email&utm_content=288933888&utm_source=hs_email

The WB believes that migrants and diasporas[7] can contribute to the further integration of their countries of origin into the world economy and even facilitate trade and foreign direct investment flows. This suggests that the new economy of the twenty-first century, in addition to its recognised technical and economic characteristics, will also be supported by labour migration, without which it can no longer be ecologically equilibrated.

The UN Secretary-General in 2018 asked on behalf of the global community, "What do we want: migration as a source of prosperity and international solidarity, or migration as the epitome of inhumanity and social divisions?".[8]

MIGRATION AND INTERNATIONAL ORGANISATIONS

An important role in the development and functioning of international mechanisms of migration regulation and in the decision-making of the world community regarding migration issues is played by: the International Organization for Migration (refugees) — IOM, the International Labour Organization (labour migration) — ILO, the World Bank (remittances) — WB and a number of other organizations and associations, e.g., OECD (Organisation for Economic Co-operation and Development).[9]

It was not until 2005, when the UN General Assembly decided to hold a High-Level Dialogue on International Migration and Development in September 2006 (Resolution 60/227), that these issues received the attention they deserve. This resulted in the creation of the Global Forum on Migration and Development (GFMD),[10] which was first held in Belgium in 2007.[11] Much earlier, in 1985, 19 of the world's most developed states, which are the main recipients of external migration, established a multilateral organisation, the Intergovernmental Consultations on Migration, Asylum and Refugees (IGC),[12] whose membership allows them, in their view, to influence international governance and decision-making mechanisms in relation to migration, including determining the direction of migration policies. While participation in the IGC entails helping to ensure orderly and humane migration management and promoting international co-operation in this field, the European migration crisis of 2014–2016 has demonstrated significant difficulties in finding practical solutions to problems of both geopolitical and economic nature.

Experts from international organisations and independent researchers have been studying the impact of migration on wages in host communities for a long time and have concluded that wages do not decrease when the number of workers increases due to external migrants. For example, this thesis is supported by a large new study of such an impact in Mexico → USA, Canada flows at the level of local North American communities in the period 2000–2015, which includes the Great Recession (Great Recession, 2008–2013) [1, p. 8].

LABOUR MIGRATION AND THE INTERNATIONAL LABOUR ORGANIZATION

To protect migrant workers and their families, the ILO has a number of conventions, both specialized and related to the regulation of other issues: women's and child labour, forced labour and others. To fully protect the migrant, both in the country of arrival and origin, it is neces-

[7] Diaspora / Demographic Encyclopaedia. Moscow: Encyclopaedia; 2013.

[8] World Bank 2023. World Development Report 2023: Migrants, Refugees, and Societies. Washington, DC: International Bank for Reconstruction and Development. The World Bank; 2023. 318 + xxviii p.

[9] International organisations dealing with migration issues. url: https://migrationnetwork.un.org/network-terms-of-reference

[10] URL: https://www.gfmd.org/

[11] The first Global Refugee Forum did not take place until 2019.

[12] The Intergovernmental Consultations on Migration, Asylum and Refugees (IGC) is an informal forum for intergovernmental information exchange and policy discussions on all issues related to the regulation/management of international migration flows. It is the world's first intergovernmental consultation mechanism on migration issues.

sary for them to ratify the convention(s). The ILO has introduced Fundamental Conventions which all member states of the organisation are obliged to ratify. These include two conventions on forced labour, with the 1930 convention having a protocol adopted in 2014 and, in accordance with ILO standards, subject to separate ratification.[13] All Persian Gulf states[14] have ratified both forced labour conventions (which helps to protect migrant workers, including at the international level), but only Saudi Arabia has ratified the protocol. Thus, in 2016. The International Trade Union Confederation filed a lawsuit[15] against the UAE for non-compliance with the ILO Convention on Forced or Compulsory Labour (No. 29) [2]. The UAE government's responses were mainly limited to the practice of implementing child labour provisions (special attention was paid to camel riders).[16] As the ILO notes, the UAE "lacks an adequate legal framework that would prevent migrant workers from being subjected to situations or practices that amount to forced labour" [2, p. 2562]. The ILO monitors both the extent to which UAE law meets the requirements of ratified conventions and its implementation. For example, it requests the government to provide statistical information on the number of migrant workers, including domestic workers, who have sought legal assistance; on the outcome of migrant labour disputes.[17]

Ratified conventions are themselves the legal basis on which national legislation must be brought into conformity. The UAE ratified the Abolition of Forced Labour Convention, 1957 (No. 105) as early as 1997, unlike, for example, neighbouring Qatar (2007), so the delay in enacting legislation is indicative of the difficulties in implementing the norms of even ratified conventions.

Despite the ever-increasing number of migrants in the world, most countries have not ratified the ILO Conventions on migration. For example, the Migration for Employment Convention (Revised), 1949 (No. 97) has been ratified by only 54 States, among which there are no Gulf States, but there are major recipients among developed countries: Germany, France, Italy, Spain, New Zealand. The Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143)[18] has even fewer ratifications (30); there are no recipient countries other than Italy and no major economies of the world among the ratifiers.

Our attention to the Persian Gulf countries is due to their uniqueness: they need and attract labour migrants as *temporary* labour force and at the same time have a rapidly growing local population due to fertility. For example, the UAE's population (by 2022) has grown 31-fold since the date of state formation (1971). The number of migrants (foreign nationals) varies by emirates, their minimum share in Al-Fujairah is 61 per cent of the total population, their maximum share in Dubai is 91 per cent; and their share in the employed population is 96 per cent [3, p. 11].

It should be noted that none of the Persian Gulf countries has ratified the ILO Convention on Domestic Workers, 2011 (No. 189), although this is the most important sector for attracting immigrants along with construction. For example, 52 per cent of migrant women are employed in the domestic sector in the UAE [3, p. 3]; of the more than 1 million Filipinos, 20 per cent are domestic workers (mainly nannies and maids) [4, p. 4].

Despite the efforts of the ILO, it is not possible to solve the problem of the low level of ratification of many conventions as a source of

[13] Many countries have taken advantage of this, as 181 out of 187 have ratified the convention and only 60 have ratified the protocol.

[14] Hereinafter refers to the States members of the Gulf Cooperation Council (Cooperation Council for the Arab States of the Gulf).

[15] In 2001 and 2002, the International Confederation of Free Trade Unions also complained to the ILO about the UAE's violations of conventions.

[16] Cases of involuntary emigration/removal of minors from South-East Asian countries.

[17] URL: https://www.ilo.org/dyn/normlex/en/f?p=1000:13101:0::NO:13101: P13101_COMMENT_ID:4049842.

[18] Full title: Convention No. 143 concerning Migrations in Abusive Conditions and the Promotion of Equality of Opportunity and Treatment of Migrant Workers.

regulation of social relations [5, p. 38]. This certainly hinders the expansion of international law in the field of migration. Therefore, it is necessary to achieve ratification of the "migration" convention(s) by all recipient countries. But this can only be done if the ILO Governing Body makes a proposal, and the International Labour Conference decides to make Convention No. 143 fundamental. This is a complex process, but without its solution effective regulation/management[19] of labour migration in the modern world is impossible.

Labour migration policies are changing even in rather conservative countries, with Saudi Arabia in 2023 expressing a desire to attract foreign workers through less restrictive policies.[20]

CHALLENGES OF A COMMON MIGRATION POLICY IN THE EU

In order to effectively regulate external migration flows (especially in case of their rapid and significant growth), the principle of supranational co-operation is of great importance [6], which in the EU, despite the failure of attempts at coordinated resettlement of refugees from countries of arrival in Europe, had another purpose — monitoring of external borders to deter irregular migration.

The EU budget allocated 10 billion euros for migration and asylum management in 2014–2020. Over the period 2021–2027, this amount will increase to 22.7 billion euros [7, p. 56]. Such differences in funding indicate, in our opinion, that the seriousness of the situation was not immediately realised. At the same time, EU countries are also pursuing national migration policies that are subjected not only to public but also to research criticism. Assuming, as some researchers do, that expert and governmental circles in Germany "did not take into account that migration over time erodes the identity of the state, changes its internal political landscape" [8, p. 53], we cannot but note that at the same time assimilation and adaptation of migrants within the existing identity is taking place.

Objective difficulties of adaptation[21] lead to emotional denial of the positive features of migration, which is used in political struggles that are far from public interests. Those political forces (parties, politicians, public unions) that play on the anti-migration sentiments of a part of the population and propose knowingly unlawful restrictions are considered dangerously populist and even extremist.

The Schengen crisis seems to be the most serious in the transition from integration to fragmentation of European economies, although the Schengen area is not a direct consequence of the EU and was incorporated into the single legislation only under the Treaty of Amsterdam (1999). The creation of internal barriers preventing migrant refugees from moving from one country of the Union to another was a very harmful solution for integration, and also ineffective in the long term [9]. The EU Commission's plan for a permanent refugee resettlement mechanism could not be adopted — it was rejected, but supranational cooperation was strengthened to manage flows and monitor Union borders [6, p. 1122].

Turkey occupies a special place in the EU migration crisis. On the one hand, it raises the practical question of using refugees to rebuild the country after the devastating earthquake of 2023, and on the other hand, referring to UN proposals to the EU and Western countries in general, it asks for trade on condition of creating sustainable jobs in the formal economy for Syrian refugees and locals. Thus, both the much-coveted development and labour adapta-

[19] We use a double term because most international organisations translate the word "management" as governance, which is not true in all cases.

[20] URL: https://www.bloomberglinea.com/english/saudi-arabia-wants-to-attract-foreign-workers-with-less-restrictive-policies/

[21] The migrant community, regardless of its form — diaspora or settlement (urban enclave of migrants), is a functional system that can ensure homeostasis both through interaction with the local community and through purely internal sources, closing in on itself.

tion of refugees/migrants requires new investments by the same highly developed countries. Let us look at these costs as an example.

EXTENT OF INVOLUNTARY AND IRREGULAR MIGRATION IN THE 21ST CENTURY.

At the beginning of 2023, there were 108.4 million forcibly displaced persons worldwide,[22] of whom 76 per cent were in low- and middle-income countries and another 20 per cent in least developed countries.[23] The reason for the mass emigration, or set of reasons, is clearly identified by the migrants themselves, whose march from Central America to the United States, for example, has been labelled "Exodus from Poverty".

An impressive example of the scale of the war-induced migration wave and methods of defence against it is the Syrian catastrophe during the armed conflicts in that country and the subsequent systemic crisis. To mitigate this wave, an agreement between the EU and Turkey was concluded in spring 2016 to reduce as much as possible the number of migrants entering the EU via the Central Mediterranean route, which was based on an agreement on financial assistance in the amount of 6 billion euros, the lifting of visa restrictions for Turkish citizens under certain conditions and a number of other issues. Despite predictions of failure on the part of third countries and discontent within the EU itself, the agreement is not only still in force (Turkey has already received 9.9 billion euros), but has also successfully solved the problem of the refugee invasion of Europe: as of 2023, the largest number of refugees — 15.22 thousand — was received by Germany, followed by France and the Netherlands — more than 5.5 thousand; significantly smaller in population Sweden and Finland resettled 3.1 and 2.7 thousand people, respectively. If we compare these countries in terms of relative rate per 100,000 population, Finland leads (49.4), followed by the Netherlands (31.6) and Sweden (30.4). Germany has a much lower rate (18.3), but it is higher than Belgium and France (8.7). It is quite wrong to speak of a wave of Syrian migrants "flooding" Western countries based on these figures — just over 37,000 people have moved to the West.[24] Therefore, Turkey's role as a successful barrier to migrant refugees cannot be overlooked in the future policies of EU countries and others experiencing similar problems. A similar thing would be effective on the path of migrants to North America via Mexico, but these flows, which cause such heated political battles in the US, are not mainly made up of refugees fleeing from disasters, but of those seeking a better fortune for both purely economic and a combination of various reasons.

In addition to the Central Mediterranean flow, there is a second major destination — Italy, where the flow of irregular migration to Italy increased by more than 50% amounting to 158,000 people in 2023.[25] Libya and Tunisia have also become key transit hubs, including for refugees and those seeking a better life. However, attempts by a number of Mediterranean countries (Italy) to create a buffer have not yielded noticeably positive results.

The extraordinary burden of unregulated migration flows that has been placed on a number of countries has led to the search for entirely new solutions to the problem. The most unexpected was the British government's attempt[26] to negotiate with the Rwandan government to resettle those who have not been granted asylum in the UK in that African country. This plan can be assessed as a grandiose one,[27] although it is too complicated to be realised quickly. Its successful implemen-

[22] The most catastrophic period was the mid-2000s.

[23] Global trends forced displacement in 2022. Copenhagen: United Nations High Commissioner for Refugees; 2023. 48 p.

[24] The author's data and calculations on: URL https://de.euronews.com/my-europe/2023/03/31/was-wird-aus-dem-eu-migrationsabkommen-mit-der-turkei-wenn-die-opposition-die-wahlen-gewin

[25] URL: https://data.unhcr.org/en/situations/mediterranean/location/5205

[26] UK Home Office statistics show a 60 per cent increase in illegal migration to this country in 2023 compared to 2022. URL: https://www.thetimes.co.uk/article/migrants-return-to-lorries-as-weather-thwarts-channel-crossings-7rtlwp3pw.

[27] For both political and economic reasons and their consequences.

tation would lead not only to the solution of the problem in Britain, but also to the development of Rwanda itself. Such an unusual project arouses resistance from Britain (decisions of the Supreme Court and the Court of Appeal) and international organisations (Human Rights Watch) and scepticism from part of the international community. Without explicitly assessing the ongoing efforts of the British and Rwandan governments to find a way out of the deadlock and start accepting migrants in Rwanda, we can at least conclude that this unexpected project shows very broad possibilities of finding solutions in crisis situations.

It should be noted that the "Turkish corridor" was followed by migrants from the Middle East, while the "Mediterranean corridor" was followed by representatives of African countries. Thus, in the first flow in the year of the peak of the migration crisis (2015), citizens of Syria prevailed (50% of all those who received protection status in EU member states[28]), and they were the majority among emigrants in Greece (57%), where 22% of them came from Afghanistan and 5% from Iraq. Eritrean nationals (25 per cent), Nigerian and Somali nationals (10 per cent each) predominated among those who moved to Italy, while migrants from Syria represented only 7 per cent [7, p. 56].

If the international community pays and is likely to pay a lot of attention to events causing migration waves, the main burden falls on the world's most developed countries, including those already providing development aid support. But many European experts do not stop there and believe that the success/effectiveness of regulating irregular migration will depend on the extent to which countries in the Global North would support the countries most affected by rising food prices by stimulating food production and increasing the resilience of the agricultural sector [10]. One cannot but agree that this is an important factor in controlling irregular migration flows, but the future of the least developed countries in such a case will be linked mainly to the constant growth of aid to them and the growing "burden" of the "rich" countries. Such a path seems to be the most obvious and simple one, but it does not lead to the goal of sustainable development of their economies, but rather to the emergence of new problems.

The most prominent permanent migrant flows are: Russia ↔ Central Asian countries, USA ↔ Mexico, Germany ↔ Eastern European countries — strongly affecting demographics and economies in the host communities.

Despite the position of many developed countries (including Russia) that it is necessary to apply a selective approach to the entry of migrants with *high qualifications* and scarce professions, all of them simultaneously need and attract low-skilled labour force [11], the need for which will exist for a long time to come. Seasonal migration, which plays an important role in large economies, has a special place in this confrontation. Seasonal workers have lower skills, and therefore the emigration of unskilled and low-skilled labour will continue in countries with the strictest selective policies. The example of U.S. farmers' losses during the government's 2017–2020 tightening of the admission of seasonal workers across the Mexican border (especially in California)[29] demonstrates the importance and necessity of foreign workers.

MIGRATION STATISTICS AND DATABASE ISSUES

The main data on migration are obtained from national censuses. The second most important source is special surveys, such as the European Union Labour Force Survey, one of the largest.[30] The United Nations Population Division, which provides estimates of international migrants, serves as a database for developing countries.

One of the world's main centres of information on migration is the World Bank, which is gradually expanding its set of indicators of international mi-

[28] In 2019, EU countries granted protection to 295,800 asylum seekers, of whom almost one in three (27%) came from Syria.

[29] URL: https://immigrationimpact.com/2017/08/14/farmers-struggle-labor-food-prices/

[30] URL: https://ec.europa.eu/eurostat/web/microdata/european-union-labour-force-survey

gration flows. The International Organisation for Migration (IOM) also has a migration database. It started as a logistics organisation for refugees and displaced persons, becoming a UN subsidiary in 2016,[31] and coordinates the UN Migration Network, established in 2019, which also includes Office of the United Nations High Commissioner for Refugees (UNHCR), the UN World Food Programme and United Nations Development Programme (UNDP). In turn, International Organisation for Migration can look to the Global Compact for Safe, Orderly and Regular Migration as a non-binding framework for state cooperation. The global mandate of International Organisation for Migration includes assistance not only to refugees and involuntary displaced persons, which UNHCR also deals with, but also to labour migrants, where its work overlaps with ILO's work. Attention to the functions of UN organisations in the field of migration is not only related to an analysis of their capacity to regulate migration flows alongside national governments. The problem is that these organisations are also involved in humanitarian assistance to *internally displaced* persons as a result of disasters, and their funding (which is usually required on an emergency basis) significantly reduces the possibilities for their systematic work in the field of international migration, which cannot but affect the effectiveness of addressing migration issues.

Local international organisations and foundations play a significant role not only in the regulation of migration, but above all in its research and accumulation of a database. The International Centre for Migration Policy Development (ICMPD), which has 20 member states and operates in more than 90 countries, should be mentioned. In its reports/statements since 2019, it analyses migration flows to European host countries and the situation in the main countries of origin of migrants, using a regional approach.

The World Bank's statistics on international migration, unfortunately, identifies overly enlarged groups of countries. The group with low and medium per capita income is particularly unsatisfactory, as it includes the least developed countries (where emigrants are refugees and illegal immigrants) and countries with above-average income (e.g., Russia, Kazakhstan), where labour migrants who arrived for economic reasons predominate. Therefore, the main migration flows noted by the World Bank are poorly comparable. Thus, it is very important to single out the Arab countries of the Persian Gulf not only because of their significant share in global migration — 17%, but also because of the role of labour migrants in their economies (up to 70% of the total labour force) and the huge gender differences of migrants, which are not found in any other flows (up to 90% of men). In addition, as a peculiar phenomenon among global migration, it is worth noting the rich countries of this region, which fall into two groups: those that need migrants as a result of a shortage of working-age population and labour force, and those that want to ease the pressure on the national labour market by emigrating due to a rapidly growing population.

THE ROLE AND IMPORTANCE OF MIGRANT REMITTANCES

In 2022, the World Bank's Global Knowledge and Policy Advice Centre on Migration and Development (KNOMAD) established the International Working Group on Improving Data on Remittance Flows [12]. This is due not only to the need for more accurate and streamlined remittance statistics, but also to the importance of this indicator in relation to the UN SDGs, including Goal 10 to reduce the cost of remittances to 3% by 2030.

In 2023, more than 200 million migrant workers sent US$ 669 billion to 800 million family members.[32] In 2023, the countries with the highest volumes of remittances received (the top five) are the fast-growing economies: India, Mexico, China, Philippines, Egypt (*see Table*). In addi-

[31] We do not touch upon the predecessors (predecessor) of IOM, which are included in the history of its activities 1951–1989 rather conventionally/ conditionally.

[32] URL: https://www.ifad.org/en/ffr

Table

The largest countries in outflows and inflows of remittances, USD $ million

Country	2022		Country	2023	
	sending remittances	share in GDP,%		receiving remittances	share in GDP,%
US	81636	0.3	India	125000	3,4
Saudi Arabia	39349	3.6	Mexico	67000	3,7
UAE	39673	7.8	China	49500	0.3
Switzerland	33550	4.1	Philippines	40000	9,2
China	18256	0.1	France	34000	1,1
Kuwait	17744	10.1	Egypt	24200	6.1

Source: compiled by the author on the basis of WB data: World Bank-KNOMAD, December 2023.

tion, the importance of remittances[33] for national economies is reflected in their share in a country's GDP. Tajikistan (48 per cent), Tonga (41 per cent), Samoa (32 per cent), Lebanon (28 per cent) and Nicaragua (27 per cent) have a significant share of remittance inflows in their GDP. But even these countries are interested in return migration and reintegration [13]. Since 2005, the Global Forum on Remittances, Investment and Development (GFRID)[34] has been organised to maximise the development impact of these "vital flows".[35]

The Table selects countries where outward transfers exceed $ 10 billion.[36] Among the largest recipient countries, Pakistan ($ 24bn) and Bangladesh ($ 23bn) have almost the same volume as Egypt, and it is equally significant for these economies, with a share in GDP of 7.0 per cent and 5.2 per cent respectively. Both groups include China, for whose economy both types of personal transfers are not noticeably important.

It should be noted that in 2022 in Russia *for the first time* incoming remittances began to *exceed* outgoing remittances, which is typical of developing countries, especially poor ones, for which the inflow of remittances plays a major role [14, p. 42]. The same situation has been observed in France for a long time, which is explained by its special position/place among the EU countries; its share among the remittance-receiving countries in the EU exceeds one fifth of the total volume (20.4%), which is much higher than that of Germany (13.7%) and Belgium (8.7%).[37] The inflow of remittances to France demonstrates the great potential of seasonal and cross-border migration for the states of the integration union. Thus, due to cross-border and seasonal migration of the French, their remittances in 2022 from Switzerland to their home country totalled € 19.2 billion and from Luxembourg it totalled € 7.1 billion.[38] France's continuing ties with countries that were its sphere of influence in the 19th century encourage labour immigration, so the highest outflow of personal transfers to countries outside the union in the EU is between France and Morocco — € 2.7

[33] The high share emphasises the importance of remittances in financing the current account and the budget deficit.

[34] Global Forum on Remittances, Investment and Development.

[35] URL: https://gfrid.org/about/

[36] This is what Russia was until 2022; the maximum in pre-crisis 2013.— USD 37.217 billion.

[37] URL: https://biteffect.net/ru/kto-lider-po-denezhnym-perevodam-v-evrope/

[38] URL: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Personal_transfers_and_compensation_of_employees#Western_European_countries_were_amongst_the_main_senders_and_recipients_of_these_cross-border_flows

billion (2022).[39] But while France is at the beginning of the second twenty countries of the world by such an important macroeconomic indicator as GDP per capita, slightly ahead of the average GDP per capita in the EU, Russia is at the end of the list of the first fifty countries, falling in 2022 by another 5 places compared to 2021.[40] This fact reflects the general economic situation affecting the inflow of foreign labour into the Russian economy.

The volume of remittances sent by labour migrants from Russia fell 3.8 times in 2023 compared to 2018 (the maximum after the 2015/2016 crisis), indicating that migrants reacted primarily to the depreciation of the rouble and worsening employment conditions that caused the outflow of foreign labour. The so-called "covid drop" was only a quarter (24.4%), while the balance of external migrants decreased by almost 2.7 times in 2020.[41]

The significant and growing role of migrants' remittances for their countries of origin is widely covered in the scientific literature [15–17]. Therefore, let us focus only on one problem of this economic, financial, and social phenomenon — the cost of remittances (personal transfers). Reduction of this indicator is one of the UN SDG 10 (indicator 10.A) and can have the most noticeable impact not only on families and households of migrants, but also on the economy of their countries of origin.

According to the World Bank's World Remittance Price Database, the fees charged for remittances remain stubbornly high: as of Q2 2023, they averaged 6.2 per cent for sending US$ 200[42] — higher than a year ago. Banks are still the most expensive channel for sending remittances (about 12.1% on average), followed by post offices (7%), money transfer operators (5.3%) and mobile phones (4,1%).[43]

The importance of remittances and their value is emphasised not only by global organisations but also by the G20 Group, as faster, cheaper, and more transparent cross-border payment services can improve the lives of millions of people, above all reducing poverty in migrant households [18], supporting economic growth, international trade, global development, and access to financial services. The G20 prioritises such progress. But this does not apply to irregular migrants, who in most cases are deprived of the possibility to send personal transfers through legal sources and have to use personal channels. Reaffirming the UN Sustainable Development Goal, the G20 has set a target that by 2030 the average global cost of sending remittances should be no more than 3 per cent (per US$ 200) and there should be no migration corridors where it exceeds 5 per cent.

Realities show that the cost of transfers between developing countries themselves is not only many times higher than this threshold, but also seems unthinkable in the 21st century. For example, fees exceed 50% for funds sent from Turkey to neighbouring Bulgaria, while in sub-Saharan Africa remittances from Tanzania to Uganda and Kenya are subject to fees exceeding 30%. In South Africa, sending across borders with neighbouring Botswana, Eswatini and even the South African enclave, the Kingdom of Lesotho, is particularly expensive. At the same time, it should be emphasised that, on the one hand, South Africa became a member of the G20 in 2023, and on the other hand, this club has a *G20 plan to facilitate remittance flows*, in which South Africa's actions are already prescribed, and the average cost of remittances in 2021 was supposed to decrease to 5%. In 2021, however, the G20 average was 8.12%, almost four times lower than South Africa's current fee. One can only hope that the country's accession to the Club will contribute to lowering this target,[44] — without which the G20 plan will fail.

[39] Ibidem.

[40] Calculated according to: URL: https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD

[41] Calculated according to: URL: https://rosstat.gov.ru/compendium/document/13283

[42] URL: https://remittanceprices.worldbank.org/

[43] URL: https://www.worldbank.org/en/news/press-release/2023/12/18/remittance-flows-grow-2023-slower-pace-migration-development-brief

[44] As suggested, by promoting competition and pressurising the cost of remittances in South Africa.

If the foreign policy pressures in the above examples are beyond reasonable economic ties and in this aspect with regard to remittances do not raise questions, the cost of foreign labour transfers between countries integrating their economies on the basis of the African Free Trade Agreement (AfCFTA),[45] shows the disinterest of the signatory states in giving it substance — the elimination of borders for the free movement of capital, goods, services and, of course, labour force.

It is also worth noting that the number of labour migrants is increasing slower than the volume of their remittances, which may indicate that the average earnings of migrants are increasing as a result of higher qualifications and better quality of the labour force.

REGULATION OF ILLEGAL/ IRREGULAR MIGRATION

The situation is viewed from a perspective centred on international law, from the point of view of the country of origin and where the country of influx is going to send the migrants — whether this region (country) is safe for them or not. Therefore, migrants/refugees coming from a country that is not dangerous for them would not be considered as potential refugees, but as disadvantaged migrants who are not eligible for refugee status and are not in need of international protection.

Although the European migration crisis is considered to be a thing of the past, irregular migration is still a problem for almost all European countries with access to the Mediterranean Sea. Spain, for example, experienced a new wave of irregular migration in 2023: the number of irregular arrivals increased by 82.1 per cent, putting a significant strain on the host country. This is especially true for the Canary Islands, which are easily accessible by water — in 2023, the number of arrivals there increased by more than 2.5 times (by 154.5%), and reached 39.9 thousand people.[46]

Despite the predominance of research on immigration problems in developed countries, its main corridors remain those within developing countries. Attitudes towards these flows have changed dramatically in the 21st century. Uganda's 2016–2020 and 2021–2025 national development plans, for example, were designed to provide an integrated development solution for refugees and their host communities, and the country became one of the first in the world to integrate refugees into national development plans. To achieve this, a *common approach* across all government agencies was adopted,[47] involving district level interventions to serve the entire population, both Ugandans and refugees.

CONCLUSIONS

The World Bank advises national governments to ensure the participation of the private sector, civil society and local authorities in the development of migration policy. With the urgent need for its correction in the Russian Federation, as evidenced by numerous initiatives of the legislative, executive branch and public associations, the state and society need to realise the role of private business and local authorities in a forward-looking vision of the immigration problem, which is more fruitful than a policy of rapid response to frequent changes in the situation of an opportunistic and economic nature. In addition, local authorities/ municipalities are at the forefront of decision-making on the problems of migrant response and integration. Therefore, it is necessary to rely on them, which is especially important for large countries such as Russia, the USA and Canada.

In the 21st century labour migration is an important macroeconomic factor for both developing countries and the "old" world, the impact of which will only increase due to the objective process of demographic ageing and declining birth rates in developed countries. This is why many countries

[45] The African Continental Free Trade Area.

[46] Source: Information from the Spanish Ministry of the Interior Affairs. file:///C:/Users/Asus/Downloads/Presentaci%C 3%B 3n%20de%20PowerPoint%20-%2024_informe_quincenal_acumulado_01–01_al_31–12–2023%20(1).pdf.

[47] We emphasise this fact, because in Russia even statistical data on migrants from different agencies diverge considerably.

of origin of labour migrants are pursuing special migration policies,[48] something that is so lacking in the post-Soviet states.

It is necessary to emphasise the difference in the attitude towards migration in the policies of receiving countries in the present and past centuries, which is that the skills and qualities of immigrants should now match the needs of their host countries. It is very important that this principle is shared by many out-migration countries, which seek to regulate processes in this way. These changes lead to the optimisation of regulated flows and the maximisation of their benefits for both receiving and destination countries.

The migration policies of states such as the United States, Canada, and Germany should be based on the federal governments' fiduciary duty to protect the reputation of these countries as equal communities for any external migrants, regardless of their ethnic, cultural, or gender identity.

To conclude the study, let us turn to the epigraph of the World Bank report, taken from a Parsi legend: "They [foreigners] will dissolve in society as sugar dissolves in milk, sweetening the life of society but not disturbing it" [3, p. iv]. Are modern societies able to accept migrants from very different cultures in the same way as Parsi society did 1,000 years ago?

[48] For example, the Papua New Guinea Government to facilitate labour migration to Australia under the Pacific Labour Mobility Scheme.

REFERENCES

1. Hanson G., Liu Ch. Immigration and occupational comparative advantage. *Journal of International Economics*. 2023;145:103809. DOI: 10.1016/j.jinteco.2023.103809
2. Malit F.T., Jr., Tsourapas G. Migration diplomacy in the Gulf — non-state actors, cross-border mobility, and the United Arab Emirates. *Journal of Ethnic and Migration Studies*. 2021;47(11):2556–2577. DOI: 10.1080/1369183X.2021.1878875
3. De Bel-Air F. Demography, migration, and the labour market in the UAE. Gulf Labour Markets, Migration and Population. *Explanatory Note*. 2018;(1). URL: https://gulfmigration.grc.net/media/pubs/exno/GLMM_EN_2018_01.pdf
4. Garratt U. The migration of domestic workers from the Philippines to the UAE and the Kafala system. *Academia Letters*. 2021. Article 1033.
5. Tkachenko A.A. The importance of the International Labour Organization (ILO) in international processes: The centenary of the international organization. *Mezhdunarodnye processy = International Trends*. 2019;17(3):36–50. (In Russ.). DOI: 10.17994/IT.2019.17.3.58.3
6. Hooghe L., Marks G. Grand theories of European integration in the twenty-first century. *Journal of European Public Policy*. 2019;26(8):1113–1133. DOI: 10.1080/13501763.2019.1569711
7. Balla E. The European Union's response to the Syrian refugee crisis. In: Stephenson M.O., Jr., Stivachtis Y.A., eds. Policy and politics of the Syrian refugee crisis in Eastern Mediterranean states. Bristol: E-International Relations; 2023:55–74.
8. Avatkov V.A., Yakimova D.A. Relations between Germany and Turkey in the context of the migration crisis. *Sovremennaya Evropa = Contemporary Europe*. 2020;(3):51–60. (In Russ.). DOI: 10.15211/soveurope320205160
9. Schimmelfennig F. European integration (theory) in times of crisis. A comparison of the euro and Schengen crises. *Journal of European Public Policy*. 2018;25(7):969–989. DOI: 10.1080/13501763.2017.1421252
10. De Coninck D., Solano G. Integration policies and migrants' labour market outcomes: A local perspective based on different regional configurations in the EU. *Comparative Migration Studies*. 2023;11(1):23. DOI: 10.1186/s40878–023–00347-y
11. Chudinovskikh O., Kharaeva O. Migration policy towards skilled labor in the Russian Federation. *BRICS Journal of Economics*. 2020;1(2):80–102. DOI: 10.38050/2712–7508–2020–11
12. Ratha D., Plaza S., Ju Kim E., Chandra V., Kurasha N., Pradhan B. Remittances remain resilient but are slowing. *Migration and Development Brief*. 2023;(38). URL: https://reliefweb.int/report/world/migration-and-development-brief-38-remittances-remain-resilient-are-slowing-june-2023-enarjaruzh

13. Ulmasov R.U., Mahmadbekzoda M. Sh. State policy in the reintegration of citizens returning from labor migration. *Vestnik universiteta (Rossiisko-Tadzhikskii (Slavyanskii) universitet) = The University Bulletin. Russian-Tajik Slavonic University.* 2023;(3):317–327. (In Russ.).
14. Tkachenko A.A. Remittance as a new phenomenon of global economy. *Ekonomika. Nalogi. Pravo = Economics, Taxes & Law.* 2014;(2):36–42. (In Russ.).
15. Sadovskaya E. Remittances from labor migrants and their role in migrant households in Central Asian countries. *Tsentral'naya Aziya i Kavkaz = Central Asia and the Caucasus.* 2006;(3):130–144. (In Russ.).
16. Toghanyan A.S., Grigoryan G.R., Kevorkova Zh.A. Research of the impact of remittances of migration processes on the economy and economic security of donor and recipient countries. *Sovremennaya ekonomika: problemy i resheniya = Modern Economics: Problems and Solutions.* 2021;(8):47–59. (In Russ.). DOI: 10.17308/meps.2021.8/2653
17. Tkachenko A.A., Ginoyan A.B. The place of remittances in financial flows into developing economies. *Finansy: teoriya i praktika = Finance: Theory and Practice.* 2017;21(6):94–107. (In Russ.). DOI: 10.26794/2587–5671–2017–21–6–94–107
18. Denisova I.A., Oksinenko V.G., Chudinovskikh O.S. The impact of the EAEU common labor market on the well-being of households of migrants: The case of Armenia. *Prikladnaya ekonometrika = Applied Econometrics.* 2022;(1):29–44. (In Russ.). DOI: 10.22394/1993–7601–2022–65–29–44

ABOUT THE AUTHOR

Alexander A. Tkachenko — Doctor of Economics, Professor, Chief Researcher, Institute for Research of International Economic Relations, Financial University, Moscow, Russia
https://orcid.org/0000-0002-8828-1761
alaltkachenko@gmail.com

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 15.01.2024; revised on 10.02.2024 and accepted for publication on 14.03.2024. The author read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-93-103
UDC 338.242(045)
JEL O32

South Korea's Experience in the Development of National Innovation System

I.G. Korotkov
Plekhanov Russian University of Economics, Moscow, Russia

ABSTRACT

Introduction. The Republic of Korea nowadays is a leader of innovative development not only in Southeast Asia, but also at the global level. Since 1950's thanks to the development of science, technology and innovation, one of the poorest agricultural countries has achieved unprecedented economic growth and became one of the leading advanced industrialised countries, which is popularly known as "Korea's economic miracle." One of the most important factors of rapid economic growth was the construction of an effective national innovation system (NIS). The purpose of the article is to analyze the main stages in the formation of the Korean national innovation system (NIS), to identify its strengths and weak points. **Methods**. The study used system analysis, structural-functional, historical and sociocultural approach. **Conclusions**. The Republic of Korea managed to construct an effective national innovation system thanks to the deduced state policy in the field of science and technology, competent strategic planning, a systematic and integrated approach to the development of innovation, large-scale and continuous R&D financing and the development of innovation infrastructure.

Keywords: national innovation system; innovation; Republic of Korea; techno-park; R&D; technology; scientific and technology policy; digitalization; information and communication technologies (ICT)

***For citation*: Korotkov I.G. South Korea's experience in the development of national innovation system. *The World of New Economy*. 2024;18(1):93-103. DOI: 10.26794/2220-6469-2024-18-1-93-103**

South Korea has been called the "Miracle on the Hangang River" and one of the four "Asian Tigers", along with Hong Kong, Singapore and Taiwan. In 1996 the country joined the Organisation for Economic Co-operation and Development (OECD), whose members are advanced economies.

In July 1953, after the end of the three-year war, South Korea was a backward agricultural economy with a GDP per capita USD 87, low industrial potential, an underdeveloped domestic market and scarce natural resources. In 50 years, the Republic of Korea has become a global innovation leader (since 2013, it has topped Bloomberg Innovation Index for 6 years in a row) with a GDP per capita USD 50331 (2022).[1]

What factors were behind the "Korean economic miracle"? The experts suppose that the country's rapid economic growth is based on an effective innovation system, sound government policy, favourable global economic environment and a well-educated and disciplined population.

KEY STAGES IN THE FORMATION OF KOREA'S NATIONAL INNOVATION SYSTEM (NIS)

The first phase. 1960s.

From 1962 to 1979 Park Chung Hee (1917–1979) was president of the country and introduced significant economic reforms. Their goal was to transform Korea into an industrialised country with an export-oriented economy.

Thus in 1962 the Economic Planning Council was established, and the first five-year economic development plan was adopted, which implied support for import-substituting and export-oriented industries (footwear, clothing and textiles). During the period of light industry development (1962–1971), foreign investment totalled USD 2.6 billion, mainly in the form of loans to the government and the private sector. This stage laid the foundation for the country's industrial development. In the Second Five-Year Plan (1967–1972), six basic sectors of the national economy received legislative support: ferrous and non-ferrous metallurgy, petrochemicals, machine building, shipbuilding, and electronics [1, p. 127].

At that time, the Republic of Korea did not have sufficient financial resources to carry out its own R&D, so it acquired technology from industrialised countries and thus gradually increased its technological potential. The country's main strategic partner at that time was Japan, with which a treaty was concluded in 1965 that defined the basic principles of co-operation between the two countries. This partnership provided Korea with the Japanese technology and capital needed to develop its own economy. In exchange for military support in the Vietnam War, the United States also provided tens of billions of dollars in technology, subsidies, loans, and grants. Overall, between 1950 and 1960, U.S. aid played a fundamental role in the modernisation and industrialisation of South Korea.

In the early 1960s, R&D in the Republic of Korea was carried out only by the Korea Atomic Energy Research Institute and the National Institute of Military Technology. Annual R&D expenditures did not exceed 9.5 million USD, and there were only 5,000 engineers and scientists in the country [2]. The Korea Institute of Science and Technology (KIST), opened in 1966, was the first organisation dedicated exclusively to R&D.

To create a legal framework in this area, the Laws on Education and Support for Science and Technology were enacted in 1967. In the same year, the Ministry of Science and Technology (MOST) was established as the main government agency implementing the state science and technology policy.

An important role in the formation of the innovation system of the republic was played by the socio-cultural factor — features of the Korean national character, which were formed under the influence of Confucian-Buddhist ethics. Thus, the fundamental values in Korean culture are reverence for elders, discipline, devotion to family (clan), patriotism, loyalty, mutual assistance, and cooperation. Education and science are very important in the Confucian tradition, which was also a positive

[1] URL: https://data.oecd.org/gdp/gross-domestic-product-gdp.htm?context=OECD

factor in the formation of the Korean national innovation system (NIS). It is known that the advantage of the Republic of Korea over other developing countries was well-educated population: the level of education in the country in the 1960s was the same as in the countries whose wealth was estimated to be twice as high [3].

As a result, the foundations of the Korean NIS were laid during the first 5-year plan. President Park Chung Hee's economic policies aimed at attracting foreign investment and increasing exports played an important role in this context. State regulation of the economy increased (multiannual plans), important steps were taken towards industrialisation and the transfer of foreign technology was initiated.

During the Park Chung Hee administration, the state began to support the largest and most promising for the economy national companies in attracting investment. In 1962, the country's banks were nationalised, and the state gained full control over domestic lending. The result of the protectionist policy of the government was the active growth of chaebols (South Korean family-clan-type companies), which appeared at the end of the Korean War and now produce about half of the country's GDP. Thanks to the concentration of capital in their hands, the largest chaebols, such as Samsung (high-tech components, founded in 1938), LG (consumer electronics and home appliances, 1947), Hyundai (automobile manufacturing, 1967), Daewoo (electronics, home appliances, automobiles, weapons, 1967), have successfully developed strategically important industries for the country's economy.

The formation of chaebols was a reflection of the Korean character trait of corporatism and collectivism. Corporatism in this context is manifested in the fact that the management structure of the company is organised on the principle of a family clan. The head of the corporation is a kind of father. On the one hand, obedience to him is unconditional, on the other hand, he guarantees patronage to the employees and, like a father, cares about their well-being, providing them with social protection. Experts consider the high loyalty of corporate members to each other to be the main positive side of this system [4, p. 318].

Second phase. 1970s — early 1980s.

At this stage, the Korean national innovation system (NIS) has undergone significant changes. In 1971, the government established the nation's first national research and technology institute, the Korea Advanced Institute of Technology (KAIST), which became a leading teaching and research university. KAIST was initially staffed by U.S.-educated scientists and engineers and engaged in both fundamental and applied research. The institute also trained scientific and engineering personnel for national science and manufacturing. Today, KAIST is the main centre for strategic research projects in the country. In 1973, the Daedeok Science Town Research Complex was established in Daedeok district to bring together public and private research institutes, venture capital funds and high-tech firms. It was later expanded to Daedeok INNOPOLIS.

The following public research institutes were established in the 1970s to carry out R&D and support industries in technology development and utilisation: Korea Test Institute of Machinery and Metals, Korea Research Institute of Chemical Technology, Korea Electronics and Telecommunications Research Institute, Korea Research Institute of Standards and Science, Korea Ocean Research and Development Institute, and others. The establishment of a number of sectoral research institutes has contributed significantly to the improvement of Korea's national innovation system (NIS) [5].

To industrialise the economy, the Republic of Korea needed a large number of scientists and engineers capable of conducting its own R&D and introducing foreign technologies into production. To solve this problem, special programmes were developed at the Korea Institute of Science and Technology (KIST). In 1976, the Korea Science and Technology Foundation was established based on the experience of the USA and other industrialised countries in financing the training of high-class specialists.

An important milestone in the protection of intellectual property rights was the establishment of the Korea Industrial Property Protection Office

(1977), which was later renamed as the Korea Intellectual Property Office (KIPO).

Thus, at the second stage of formation of the national innovation system (NIS), the state began to provide significant support to the majority of capital-intensive industries, promoted the strengthening of technological potential, the creation of research institutes, the development of higher education and the training of R&D personnel. The national patent system was further developed, conditions were created for the return of scientific personnel to the country, the intensity of R&D increased, the role of science in production was strengthened, and the use of own technologies increased.

The third phase. 1980s.

In 1980, South Korea experienced an economic crisis. For the first time since 1962, the national economy showed negative growth and the balance of payments deteriorated. To remedy this situation, the government launched large-scale economic reforms.

Fundamental research and R&D received additional funding, including attracting foreign direct investment. At the same time, the country liberalised banking, customs control, as well as finance and trade regulations. The government also took measures to strengthen control over the activities of chaebols and began to exert less control over financial institutions and credit organisations. A number of state-owned banks were privatised with the state retaining the right to appoint executive directors and top managers [1, p. 131].

At this stage, the Korean government began to build a strategy for the country's scientific and technological development. In 1982, the First National R&D Programme was adopted.

In the 1980s, the structure of research funding continued to change towards an increasing share of the private sector. This was facilitated by significant tax incentives and other government support measures for private companies working in the field of high technologies.

Following American and Japanese experience, technoparks and technopolises were created to organise the transfer of technologies from science to production, which later became centres of technological development in the regions (Daejeon, Gwangju). Universities have also received additional opportunities for the transfer of developed technologies in the form of their own technology transfer centres and firms for the commercialisation of R&D results.

In order to train a sufficient number of highly skilled people for the innovation economy, the Korean government increased education spending up to 6.3 per cent of GDP in 1982 [5].

During this period, the government took measures to stimulate the development of priority high-tech industries (semiconductor manufacturing, ICT, radio electronics). One of the measures of state support for semiconductor production was the adoption of a programme of accelerated depreciation of equipment for 4–7 years and compensation of 50% of research and development costs in case of positive results in strategically important areas. The government's measures accelerated the development of these knowledge-intensive industries and made them one of the leaders of the Korean economy.

In 1985, a number of joint international scientific programmes were adopted, initiating long-term scientific and technological cooperation between the countries. Under these programmes, by 2000 the Republic of Korea was involved in about 1,500 projects with the United States, Japan, China, Germany, the United Kingdom and Russia. International co-operation and exchange of experience have given new impetus to the development of Korean science and technology [6].

At this stage Korean government began to build a long-term strategy of scientific and technological development of the country, fundamental research and applied R&D received additional funding and the technopolises and technoparks gave the impetus to the innovative development of regions.

Fourth phase. 1990s.

The fourth stage was characterised by the expansion of international trade relations and further globalisation. In the early 1990s, the Korean

government embarked on a course of deregulation and decentralisation of economic processes. Several ministries were restructured, and more than sixty state-owned enterprises were privatised to reduce the influence of large corporations on the economy.

During this period, the efficiency of R&D and production units of chaebols declined, and the restructuring of the innovation sphere followed the path of unbundling conglomerates. In order to improve the competitiveness of Korean chaebols in the global market, it was decided to encourage their specialisation in 3–5 priority sectors. At the same time, the government implemented measures to support small innovative enterprises.

One of the measures was a programme adopted in 1993 to bring together industrial enterprises, universities and research institutes for joint research and production activities. The programme also enabled small industrial enterprises to recover part of their R&D and technology implementation costs (50 per cent was reimbursed by the state and 25 per cent was reimbursed by the local authorities). Thanks to the measures taken, between 1993 and 2004, 5,026 patent applications were filed, 10,446 cases of process improvement and 13,600 cases of prototyping were recorded [7]. Since 1996, the science and technology sector has been using a project-oriented financing system instead of an estimated system, and the funds for research conducting have been distributed on a contractual basis. In 1997, the Korean government established the National Intellectual Property Agency (KIPO), modelled on the US patent system.

In the same year, the first five-year plan for the development of scientific and technological innovation for 1997–2002 was adopted. The document set the goal of reaching the scientific and technological level of the G7 countries by the beginning of the 21st century. The plan envisaged an increase in state investment in R&D (up to 5% of the total state budget), growth of state investment in fundamental research (up to 20% of the total state budget), training of qualified researchers (40 people per 10,000 population) [8]. Five-year planning, which has become one of the main principles of Korea's innovation policy, ensured the growth of exports of high-tech products, as well as an increase in the number of publications and patents.

At this stage, technology incubators and business incubators have played an important role in shaping Korea's innovation infrastructure. The first ones established in 1991 following the experience of Israel were state-owned incubators. The first private (Jungbu Industrial Consulting Inc.) and People's (Ansan Business Incubator) incubators were established in 1993. Since 1997, the country started to establish technoparks, and in 1998 the Korean Technopark Association was created with Daedeok being the main of the six incubators [9].

In 1998, the government transformed several dozens of national universities into research institutes, which began to specialise in fundamental research [10]. In the field of applied research, the importance of corporate laboratories increased. With more than 5 employees they could already receive state support. In general, by the mid-1990s, the number of researchers in the country had grown to a level close to that of developed European countries (29 researchers per 10,000 population).

In 1998, the KOSBIR (Korea Small Business Innovation Research) venture capital programme was introduced, under which government institutions and ministries were required to allocate at least 5% of R&D funding to small innovative enterprises. Under this programme, SMEs received preferential tax treatment and technical risk insurance.

In 1999 the government established the National Council for Science and Technology, whose main tasks were to coordinate government policy in the field of science and technology, establish priority research programmes and increase funding for scientific research. The Council was designed to improve the efficiency of R&D investment by prioritising the development of knowledge-intensive industries (such as nano- and biotechnology, information, aerospace, and environmental technologies) and to contribute to the preservation of the country's cultural heritage.

At this stage, state-funded research institutes were given the opportunity to work independently.

Special organisations were established to improve the efficiency of research and coordinate their activities. Eight research institutes were united by the Ministry of Science and Technology, and the Korea Institute of Science and Technology Evaluation and Planning (KISTEP) — became the main one.

Science in the Republic of Korea is supported primarily through government programmes. In particular, from 1999 to 2009, the programme "Research, design and experimental development at the turn of the 21st century" was implemented with a budget of USD 3.5 billion. The programme provided support for 25 major interdisciplinary projects in priority technological sectors.

In 1999 the Government of the Republic of Korea adopted the strategic initiative "Long-Term Science and Technology Vision 2025" (Vision 2025) which included three phases.[2]

The first one (up to 2005) was to make the most efficient use of available resources, improve the legal framework and develop infrastructure to make the Republic of Korea one of the 12 advanced scientific and technological powers and take a leading position among Asian countries.

In the second one (up to 2015), through intensive R&D development, Korea should have become the leader of the Asia-Pacific region in R&D and rank among the top 10 leading economies in the world.

The third one (up to 2025) was aimed at catching-up the level of scientific and technological development of the G7 countries.

In order to achieve these targets within the planned timeframe, the Korean government passed the Science and Technology Act in 1999 and began to implement the 21st Century Frontier Science Programme.

In 1960–1990, the scientific and technological development of the Republic of Korea was not based on foreign direct investment, but on the application of foreign technologies in industry: in electronics — American and German technologies, in automobile manufacturing — American and Japanese technologies, in shipbuilding — British technologies. The chosen strategy ensured the active development of these industries and increased the competitiveness of their products in the domestic and global markets.

Thus, by the beginning of the 21st century, the Republic of Korea had developed an effective innovation system that allowed local products to compete successfully in international markets. At this stage, the first five-year plan of scientific and technological innovation, the Science and Technology Act, the strategic document "Long-term forecast of science and technology development until 2025" were adopted; the National Council for Science and Technology and the National Intellectual Property Agency (KIPO) were established; a number of programmes for scientific and technological development of the country were implemented.

Fifth phase. From 2000 to the present

During the recovery of the Korean economy from the Asian financial crisis and the rise to power of President Kim Dae-jung (1998–2003), the development of science and technology had become of paramount importance to the country. Most attention had been paid to informatics, biotechnology, fundamental sciences, mechatronics and robotics, new energies, and new materials.

In 2001, the Korean government approved the first basic five-year plan for the development of science and technology, defining the goals and objectives of the country's scientific and technological development and measures to achieve them: increasing R&D funding, improving the infrastructure for research and technology commercialisation, upgrading the skills of R&D specialists, and creating regional innovation clusters. A framework law on science and technology was also adopted in 2001. Subsequently, similar basic plans were adopted by the government every five years thereafter.

Korea was expected to take the lead among Asian countries in the first phase of the "Long-term forecast" implementation. However, this result was not achieved, and Japan retained its leadership in

[2] Monitoring and analysis of policies and public financing instruments. Country Review Korea. European Commission. URL: https://ec.europa.eu/invest-in-research/pdf/download_en/korea.pdf

the region.[3] The goals of the second phase (up to 2015) were not fully implemented either. According to the Global Innovation Index 2016, Korea was the second most innovative country in the Asia-Pacific region, being second only to Singapore. It also failed to enter the list of world's top ten leading economies.

The Korean "economic miracle" was made possible largely due to the development of national science and technology based on large-scale and continuous R&D funding. Domestic R&D expenditure has increased steadily from 2.1% of GDP in 2000 and up to 4.9% of GDP in 2021.[4]

The effectiveness of Korea's national innovation system (NIS) is confirmed by its high position in various innovation development indices. According to the Bloomberg Innovation Index, the country confirmed its leadership among 95 countries in 2022. To calculate the index, seven key indicators are examined: R&D intensity, manufacturing, productivity, concentration of high-tech companies, efficiency of higher education, share of researchers in the total number of employees and patent activity. The Republic of Korea performed best in such categories as R&D and value added in manufacturing. The country ranked 18th in the world in terms of productivity and 20th in terms of patent activity. According to the Bloomberg index, Korea outperformed such countries as Germany, Finland, Switzerland, Israel, Singapore, Sweden, the United States, Japan and France in terms of the level of innovation development.

The Global Innovation Index ranked the country 6th in the world and 1st in the Southeast Asia region in 2022, overtaking Singapore.

The Republic of Korea is among the most advanced countries in the Information and Communication Technology Development Index. According to the ICT Development Index, it ranked 2nd in the world in 2017. Korea in the ranking is followed by Switzerland, Denmark, Great Britain, Hong Kong, the Netherlands, Norway, Luxembourg, Japan, Sweden and Germany. This index is calculated on the basis of indicators characterising access to the Internet, cellular communication, radio systems, tele-systems, IT infrastructure development, etc., and assesses the level of ICT use and practical knowledge among the population of countries [11].

According to a 2017 study, the digital sector's share of GDP in the Republic of Korea is the highest in the world (*Fig. 1*).

In the same year, Korea also recorded the world's largest share of ICT employment as a percentage of total employment in the economy (*Fig. 2*).

In April 2019, South Korea became the first Asian country to launch commercial 5G wireless network services, and in July Korea's SK Telecom announced the launch of the world's first 5G roaming service with Switzerland's largest mobile operator Swisscom.

The country has made significant progress in building a national innovation system (NIS) through strategic planning and a systematic and integrated approach to innovation development. The government's strategic vision of innovation can be traced back to the 1980s. Korea's current innovative development is largely due to the implementation of the concept of the "creative economy".

Creative industries are economic sectors based on collective and individual creativity, talent, and skill, which can create new jobs through the commercialisation of intellectual property. The Korean government's decision to switch to the concept of "creative economy" was influenced by the following factors: the country's almost complete lack of natural resources; increasing competition in the Asia-Pacific region (primarily with Chinese manufacturers); growing social tension due to the decreasing share of small and medium-sized businesses in the country's economy.

The state programme "Creative Economy" was adopted in late 2012 when President Park Geun-hye came to power. It focuses on supporting start-ups, the development of small and medium-sized innovative enterprises and innovation zones such as INNOPOLIS.

[3] The Global Technology Revolution 2020, In-Depth Analyses. The RAND Corporation. URL: http://www.rand.org/content/dam/rand/pubs/technical_reports/2006/RAND_TR 303.pdf

[4] URL: https://data.oecd.org/rd/gross-domestic-spending-on-r-d.htm

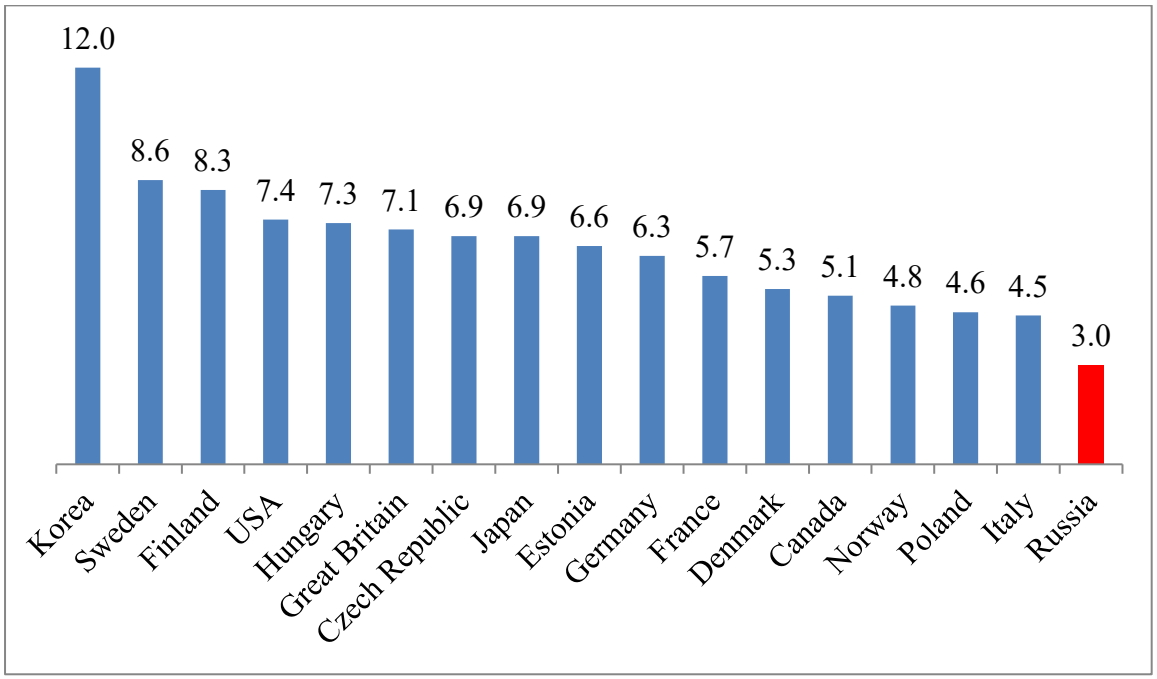

Fig. 1. **Digital economy contribution to GDP, % (2017)**

Source: compiled by the author.

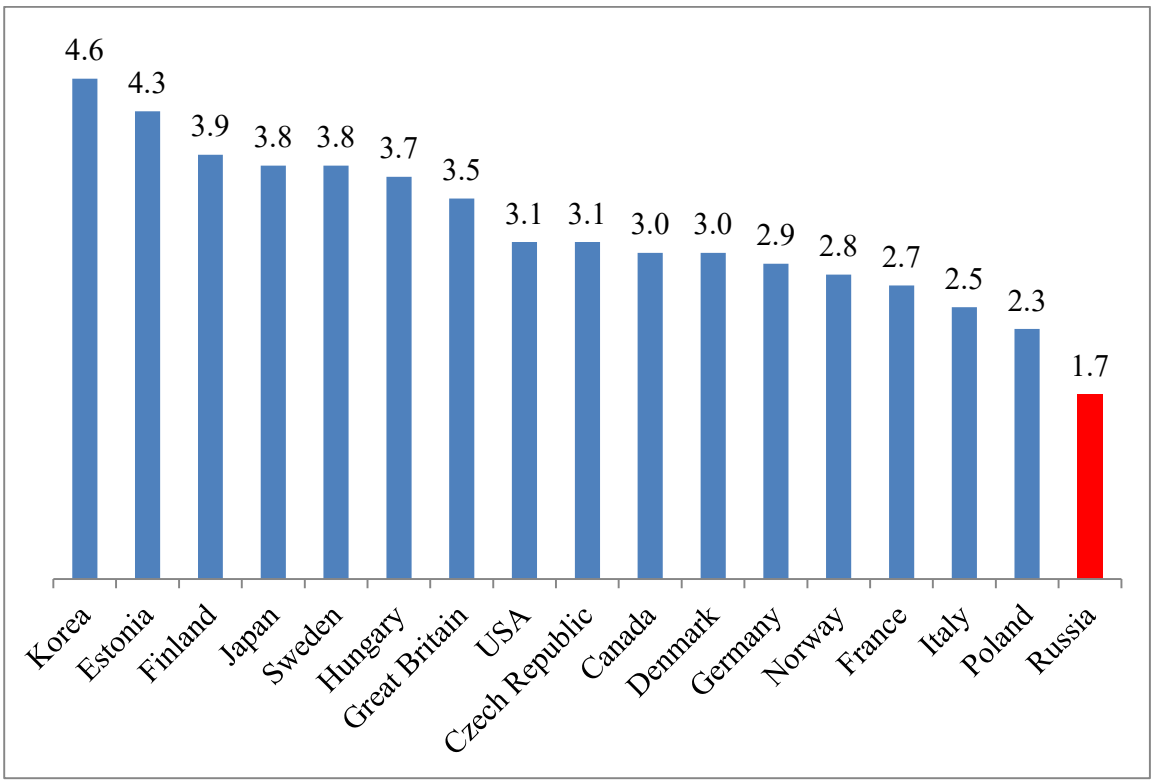

Fig. 2. **ICT employment indicator (2017)**

Source: compiled by the author based on OECD, ICT employment (indicator). URL: https://www.oecd-ilibrary.org/science-and-technology/ict-employment/indicator/english_0938c4a0-en

The Ministry of Science & ICT was established to implement the programme and in mid-2013 developed a programme implementation plan with three main goals, six strategies and twenty-four objectives.

The main objectives were:

- Creating new jobs and markets through innovation development (640,000 new jobs in the first 3 years);
- Establishing the Republic of Korea as a world leader in innovation, especially in telecommunications and the Internet of Things (IoT), by increasing R&D spending by 40 per cent from current levels;
- Creating a society that prioritises creative thinking over traditional conservative Korean thinking.[5]

Since 2013 the Korea Development Bank has been the main source of government funding for the creative economy.

Since the 2000s the national R&D strategy has gradually shifted from a strong government initiative to the creation of an innovation ecosystem based on public-private partnerships. For example, in 2005 the Daedeok Research and Development Complex was expanded to the Daedeok INNOPOLIS — special research and development zone, a regional innovation cluster linking research, technology commercialisation and industrial production. Daedeok INNOPOLIS is a world-class innovation cluster consisting of 26 government-funded research institutes, 7 universities, 1,700 companies and more than 30,000 research and development employees.[6] Similar regional centres have since been established following this model, and there are currently five INNOPOLIS centres (Daedeok, Gwangju, Daegu, Busan and Jeonbuk) in the country, which are brought together by the INNOPOLIS Foundation.

INNOPOLIS is the backbone of innovation growth and a key driver of economic development in South Korea. By fostering an innovation ecosystem, INNOPOLIS creates a consumer-oriented R&D environment, enables technology commercialisation and job creation, and supports the growth of SME technology start-ups to become the backbone of the country's innovative growth and industrial development.

INNOPOLIS Foundation has full membership in ASPA (Asian Science Parks Association) and IASP (International Association of Science Parks and Areas of Innovation). Based on a network of co-operation with science parks around the world, INNOPOLIS supports innovative companies to expand their business abroad.

An important indicator of innovation economy development is the share of expenditure on civil research and development (as a% of GDP). The Republic of Korea ranks 2nd in the world after Israel in this indicator (4.81% in 2021), 9th in the world in terms of the total number of research and development personnel (203 per 10,000 employed in the economy), and 3rd in terms of the number of researchers (166 per 10,000 employed in the economy).[7]

In a few decades, South Korea has made a transition from an agricultural economy with a low standard of living and high inflation to one of the leaders of innovative development. This has been possible largely due to effective government policy. The key factors of Korea's success that distinguish it from other rapidly developing countries have been effective management and a well-educated, motivated, and low-paid labour force compared to developed countries. Korean pupils and students are regularly ranked among the top performers in OECD PISA tests, and Korea outperforms other OECD countries in university education. Its investment in human capital has ensured that it has high efficiency and quality of innovations in use.

The socio-cultural factor has also played an important role in the country's economic success: the discipline, perseverance, and diligence of the Korean

[5] Strengthening the creative industries for development in the Republic of Korea. United Nations conference on trade and development. New York and Geneva, 2017. URL: https://unctad.org/system/files/official-document/ditcted2017d4_en.pdf

[6] URL: https://www.innopolis.or.kr

[7] Science Indicators: 2023. Statistical collection. National Research University "Higher School of Economics". MOSCOW: NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS; 2023.

people, based on the principles of Confucianism, which cultivates a conscientious attitude to work and respect for hierarchy [12]. At the same time, Korea is one of the world leaders in terms of investment in research and development, conducting continuous and large-scale financing of research and development. The development of human capital, science, technology, and innovation has allowed to build a national innovation system (NIS), which has become the main supporting factor of stable economic growth. The country did not capitalise on its abundant natural resources, but formed its competitive advantages at the expense of imported raw materials and energy, while competing on world markets with high-quality high-tech exports.

The analysis of the main stages of formation of the national innovation system in Korea shows that reliance on foreign technologies and effective government policy, which united the main actors of the national innovation system — the state, private business and scientific community — helped to achieve high rates of scientific and technological development in a relatively short period of time. South Korea's innovation model focuses on the development of innovation infrastructure. The government economic policy helps to ensure the country's receptivity to scientific and technological progress, and promotes coordination between different regions and sectors of the economy in the field of science and technology. [13].

Today the Korean economy has a number of industries that are highly internationally competitive: automotive, semiconductors, home appliances, telecommunications, metallurgy and chemicals. However, Korea lags far behind the developed countries in terms of total accumulated investment in science and technology. Since the 1970s, developed countries have invested an average of about 2% of GDP in research and development annually (according to OECD data[8]), while the Republic of Korea did not start investing in research and development on a large scale until the late 1990s. Thus, it is about 7 times behind the United States in terms of accumulated investment in science and technology.

There are still some weak points in South Korea's national innovation system (NIS) that hinder its successful development:

- The continued dominance of large firms (chaebols) in the R&D development despite government efforts to develop the innovation potential of small and medium-sized enterprises.
- Overemphasis on short-term industrial-oriented research to the detriment of long-term fundamental research.
- Relatively weak internationalisation of the national research system.
- Underdeveloped research potential of universities.
- Lagging productivity in the service sector compared to the manufacturing sector [14].

Thus, the potential of the national innovation system (NIS) of the Republic of Korea depends on the effective involvement of small and medium-sized enterprises in the innovation sphere, as well as encouraging the growth of start-ups. The country needs to enlarge its own fundamental research, reduce dependence on foreign technologies and increase budgetary funding for research and development (R&D).

[8] URL: https://data-explorer.oecd.org/

REFERENCES

1. Kim C.-K. Korea's development policy: Experience and implications for developing countries. Seoul: Korea Institute for International Economic Policy; 2008. 486 p.
2. Chung S. Innovation, competitiveness, and growth: Korean experiences. Lessons from East Asia and the global financial crisis. Annu. World Bank conf. on development economics (Seoul, June 22–24, 2009). Washington, DC: World Bank; 2011:333–357. URL: https://www.rrojasdatabank.info/wbdevecon10–22.pdf (accessed on 18.10.2023).
3. Kolotyrina E.A. Specific features of innovation system formation of the Republic of Korea. *Vestnik Rossiiskogo universiteta druzhby narodov. Seriya: Ekonomika = RUDN Journal of Economics. Series: Economics.* 2015;(2):96–105. (In Russ.).

4. Vasilenko I.A., Vasilenko E.V. The art of international negotiations. Moscow: Mezhdunarodnye otnosheniya = International relations; 2021. 432 p. (In Russ.).
5. Ryazanova A.N. State policy regarding human capital as a factor of successful technological development of South Korea 1950–2010. *Vestnik Tomskogo gosudarstvennogo universiteta = Tomsk State University Journal*. 2012;(357):96–99. (In Russ.).
6. Troyekurova I.S., Kolotyrina E.A. International science and technology cooperation of the Republic of Korea. *Izvestiya Saratovskogo universiteta. Novaya Seriya. Seriya: Ekonomika. Upravlenie. Pravo = Bulletin of Saratov University. New Series. Series: Economics. Management. Law.* 2015;15(1):28–37. (In Russ.).
7. Kim J.-Y. SME innovation policies in Korea. In: The policy environment for the development of SMEs. Singapore: Pacific Economic Cooperation Council; 2007:129–149. URL: https://www.pecc.org/images/stories/publications/SME-2007–6-SME_Innovation_Policies_in_Korea-Kim.pdf (accessed on 14.10.2023).
8. Khalipov V.D. The innovation-oriented development of economy of the Republic of Korea. *Teoriya i praktika obshchestvennogo razvitiya = Theory and Practice of Social Development.* 2015;(14):67–69. (In Russ.).
9. Chung S. Excelsior: The Korean innovation story. *Issues in Science and Technology*. 2007;24(1). URL: http://issues.org/24–1/chung/ (accessed on 14.10.2023).
10. Gang K.W., Abetti P.A. The global competitiveness of South Korea: The role of government-funded research institutes. *World Review of Science, Technology and Sustainable Development*. 2010;8(1):1–28. DOI: 10.1504/WRSTSD.2010.033311
11. Andrianov V.D. The main trends in the implementation of the strategy of digital transformation of the economy and society in the Republic of Korea. *Obshchestvo i ekonomika = Society and Economy.* 2022;(3):100–117. (In Russ.). DOI: 10.31857/S 020736760019065–0
12. Popov E.V., Simonova V.L., Tikhonova A.D. Economic models of innovation activity based on digital platforms. *Mir novoi ekonomiki = The World of New Economy.* 2023;17(2):6–17. (In Russ.). DOI: 10.26794/2220–6469–2023–17–2–6–17
13. Cha S.H. Myth and reality in the discourse of Confucian capitalism in Korea. *Asian Survey*. 2003;43(3):485–506. DOI: 10.1525/as.2003.43.3.485
14. Kang S. Korea's national systems of innovation (70 years): Framework and national experience. In: Experts meeting on national systems of innovation (Paris, February 21–23, 2018). Vienna: Climate Technology Centre and Network; 2018. URL: https://www.ctc-n.org/files/national_systems_of_innovation_experience_korea.pdf (accessed on 18.10.2023).

ABOUT THE AUTHOR

Ilya G. Korotkov — Lecturer in the Department of World Economics, Plekhanov Russian University of Economics, Moscow, Russia
https://orcid.org/0000-0002-8467-5157
korotkov.ig@rea.ru

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 12.11.2023; revised on 10.12.2023 and accepted for publication on 14.01.2024. The author read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-104-115
UDC 338.28(045)
JEL E69

Institutional Transformations of the SME Sector and the Need to Change the Priorities of Its State Support

A.A. Blokhin[a], K.V. Glukhov[b]
[a,b] Institute of Economic Forecasting of the Russian Academy of Sciences, Moscow, Russia;
[a] Financial university, Moscow, Russia

ABSTRACT

The article compares the declared goals and the actual dynamics of the development of the sector of small and medium-sized enterprises in Russia. This sector receives quite significant government support but does not fully use it for its own purposes and development, transferring part of the income to larger companies. Large companies dominating SMEs receive institutional rents in this way, and the state, in fact, finances their development. The relevance of the topic is determined by the need for structural and institutional restructuring of the Russian economy in the context of sanctions. State policy should focus more clearly on identifying and overcoming barriers to the development of small, medium, and large businesses. Such barriers include the transition from a medium-sized business to a large one when the annual revenue reaches the threshold of 2 billion rubles.

Keywords: small and medium-sized enterprises; state support; institutional rent; institutional traps; barriers; dominance; hierarchy of the economy; lists of SMEs

For citation: **Blokhin A.A., Glukhov K.V. Institutional transformations of the SME sector and the need to change the priorities of its state support.** ***The world of the new economy.*** **2024;18(1):104-115. DOI: 10.26794/2220-6469-2024-18-1-104-115**

Small and medium-sized enterprises are singled out as an important sector of commercial organisations because of their special influence on the output of various goods and services, the labour market, and the income of the population. It is believed that a developed SME sector indicates the presence of highly productive enterprises [1], creating new jobs [2, 3], introducing innovations, developing new market niches [4–6]. The topic is particularly relevant due to the deep institutional transformation of the Russian economy caused by external shocks. The SME sector could contribute to the search and mastering of tools for its adaptation to new conditions, "launching" structural changes, including at the micro level.

The need to support and develop the SME sector in Russia has been discussed by the scientific community and government leadership since the late 1980s. [7]. State support measures have been actively implemented since the mid-2000s. [8, 9], but their effectiveness is still assessed low — they have not led to the required changes [10, 11]. The declared general goals and principles remain unchanged: job creation, growth of the sector's share in GDP, introduction of innovations, improvement of the quality and diversity of services.[1] However, in different periods the emphasis in them shifts. Thus, the 1995 framework law proclaimed the goal of creating at the federal level economic, legal, and organisational conditions for the formation of a developed infrastructure of small business that would ensure its effective growth.[2] In the Federal Law of 24.07.2007 No. 209-FL "On the Development of Small and Medium-Sized Enterprises in the Russian Federation" (209-FL)[3] the objectives are expanded and clarified in favour of SME development, increasing competitiveness, increasing the share in GDP, increasing the number of employees — the focus shifts from formation and sustainable functioning to SME development. The changing range of objectives can be observed in the relevant strategic planning documents and SME development programmes. However, the situation in the sector remains approximately the same (*Table 1*). More precisely, it does not manifest itself in the mentioned targets.

209-FL was supposed to form a new approach to SME entities, define the principles of state support, including special tax regimes and simplified rules. Since its entry into force, many programmes and support measures (financial, tax, etc.) have been introduced at the federal and regional levels. The main ones are the provision of soft loans, subsidies, and tax incentives,[4] including a variety of non-financial measures (consulting services, assistance in registration, etc.) approved at the regional and municipal levels. However, their impact on the sector is difficult to assess.

Despite a wide range of measures, the contribution of the SME sector to GDP (*Table 1*) remains low compared to developed countries and has hardly grown over a long period of time (in the Republic of Korea the sector accounts for 48 per cent of GDP, in Great Britain — 51 per cent, in Germany — 53 per cent and in Finland — 60 per cent) [12].[5]

It should be noted that significant differences between the indicators of 2000 and 2010 and subsequent years are caused by changes in the methodology of their accounting.

The concept of "medium-sized entrepreneurship" appears in the legislation with the entry into force of 209-FL. Before that, support for small businesses was mainly based on the Decree of the President of the Russian Federation of 04.04.1996 No. 491 "On priority measures of state support for

[1] Report on the results of the study of the structure and growth dynamics of SMEs — recipients of state support in 2020. URL: https://corpmsp.ru/upload/iblock/b9d/Otchet-o-rezultatakh-issledovaniya-struktury-i-dinamiki-rosta-subektov-MSP-_-poluchateley-gosudarstvennoy-podderzhki-_2020_.pdf (accessed on 20.06.2023).

[2] URL: https://www.consultant.ru/document/cons_doc_LAW_6857/

[3] URL: https://www.consultant.ru/document/cons_doc_LAW_52144/

[4] URL: https://www.economy.gov.ru/material/directions/nacionalnyy_proekt_maloe_i_srednee_predprinimatelstvo_i_podderzhka_individualnoy_predprinimatelskoy_iniciativy/ (accessed on 20.06.2023).

[5] Country data are given only for small businesses without medium-sized businesses.

Table 1

Main indicators of SME dynamics for the respective years (data for 2000 — only for small business)

Indicator/year	2000	2010	2015	2021
SME share in GDP, %	10.0	21.0	19.9	20.3
Number of SMEs, million units.	0.875	3.08	5.52	5.68
Share of SME employment (of total labour force), %	12.00	26.00	25.50	20.65
Number of people employed in SMEs, mln people	7.60	17.61	18.45	15.49

Source: Rosstat data: https://rosstat.gov.ru/storage/mediabank/MSP_v_VVP_s_2017.xlsx; https://nisse.ru/upload/iblock/700/SME_2012_25.07.2012.pdf; https://cyberleninka.ru/article/n/kolichestvo-subektov-malogo-i-srednego-predprinimatelstva-i-chislennost-ih-rabotnikov-analiz-slozhivsheysya-struktury/viewer; https://rosstat.gov.ru/storage/mediabank/obsled-tom1.pdf

small business in the Russian Federation".[6] In the databases of Rosstat from 2003 to 2007 (earlier data are not available) only "small business" appears inclusive.

Since 2017, the category of labour activity "self-employed" — those who have the right to receive tax and other benefits from the state under a number of SME support programmes (for example, under the "Programme 1764"[7]), but are not included in the unified register of SME entities [13]. Over the past two decades, tax regimes for small businesses have been repeatedly clarified (for example, micro- and medium-sized enterprises were separated from it and individual entrepreneurs and self-employed were added).

Thus, the dynamics of the SME sector and its declared development goals have remained very poorly linked for a long period of time. More effective SME support requires a shift towards measuring the impact of these measures, eliminating redundant expenditures, and focusing on genuinely useful areas.

The authors believe that it is necessary to identify the existence of broad zones of leading dynamics in the SME sector (including their dependence on the sectoral and institutional characteristics of companies), to show their relationship with the activity of their affiliates — large companies, banks, retail chains — and on this basis to revise the existing approaches to SME support.

To achieve the above goal, it is convenient to use the theory of economic dominance in a multilevel economy [14], according to which in many sectors of the Russian economy in recent years there has been a serious consolidation of big business and deepening of its stratification by different levels: alpha-, beta- and gamma [15]. Businesses with better institutional conditions receive non-market advantages of access to better resources, as well as institutional rent, which is interested to use in lobbying for new institutional barriers in worse conditions. Such stratification not only separates the sources and factors of growth by levels, but also forms stable barriers between them, and, consequently, institutional traps [16]. Larger businesses protect their markets from the entry of weaker, smaller firms [17–19]. The SME sector in this hierarchy usually belongs to the "lower" level and falls into the corresponding traps of gamma business — low incomes, catch-up development, limited growth prospects.

It follows that the effects of SME support through the mechanisms of redistribution of institutional rents are received by larger Russian and foreign businesses.

Firstly, many companies in the SME sector are subsidiaries of large companies [20] and, as a rule, participate in the formation of costs. Even if profit centres in holdings are represented by small com-

[6] URL: https://base.garant.ru/106121/

[7] URL: https://base.garant.ru/72141688/

panies in terms of the number of employees, they do not fall under the criteria of SMEs because of the volume of products shown in reports.

Second, when co-operating in the production of complex products, it is usually the later stages of assembly or processing that provide more value added. Consequently, most of the profitability is provided by the large enterprise that manufactures the final product for the business, and least of the profitability is provided by the numerous small and medium-sized suppliers.

Thirdly, SME competition among SMEs leads to the emergence of more successful growth leaders who become attractive for takeovers by larger companies. Their successful market strategy then yields results outside the SME sector.

Fourthly, there is always the possibility of SMEs growing and breaking through to a higher level — then they themselves become leaders of a group or network of small business companies, growing and "fragmenting" as they approach the threshold beyond which they cease to be considered SMEs and lose their respective advantages. Sooner or later, the group leader company itself becomes a profit concentration centre and ceases to be a small or medium-sized one.

Fifth, in countries with developed economies (banking systems), the centres of profit formation are not only the parent companies of holding companies, but also financial or other intermediary structures. This makes it possible to generate a large number of small business companies in the service sector, leaving their profitability under the control of banks, trade or other organisations. In Russia, such a mechanism has not yet become widespread — small businesses remain under the strong influence of large companies or city and regional authorities, so their marketing strategies are limited to the dominant structures.

All of these and many other similar mechanisms are, in fact, ways of redistributing institutional rents from small businesses to larger businesses, often foreign. At the same time, the latter can dominate over companies in the Russian SME sector, not even operating in the Russian market, but using the instruments of prices, tariffs, admission to foreign markets, product certification rules and other restrictive measures. In 2022–2023, there were systemic changes in such relations, but their impact on industry dynamics and the SME sector can be assessed only when the relevant statistical and reporting data become available.

Whether Russian or foreign companies dominate the SME sector in Russia, it can be figuratively thought of as a "nutrient broth" or "plankton" for larger businesses. The questions then arise: does the state consciously support big business by providing its aid to SMEs? And if so, should the objectives of such a policy be reformulated?

In order to test these theses, a hypothesis is formulated: in the SME sector there are significant segments in terms of volume and number of companies that are growing rapidly and very rapidly, the effects of which are manifested externally.

In this case, it should be established where the growth of successful SMEs "transitions to": (a) they continue to grow, gradually becoming large, including absorbing other growing companies; (b) they are absorbed by a large business or were originally subsidiaries and dependent on it and due to that they grew; (c) they lose the speed of development and "split" into smaller ones, approaching a certain barrier.

If this hypothesis is true, it becomes clear why the state support measures do not have the desired effect — it manifests itself in the development of other sectors (the state, supporting small businesses, actually promotes the growth of large businesses). Then the support should be more targeted — aimed not so much at the growth of companies, but at overcoming the barriers to their development. In this case, it is necessary to understand how support should be redistributed and reformatted, focusing it exactly where it is needed most.

The hypothesis was tested by analysing information on the composition and some economic indicators of SMEs from the register of the Federal Tax Service of Russia (hereinafter — the FTS register). In 2021, it contained information on 5.8 mil-

lion organisations and individual entrepreneurs. However, there is no information on revenue, connections with the public sector, dependence on large legal entities, presence or absence of non-profit organisations and individual entrepreneurs in the list. In addition, it is impossible to upload data on a given list of SME entities.

Databases such as SPARK-Interfax (hereinafter SPARK)[8] and Rusprofile[9] are more convenient for research. The former reflects data on 1.4 million SMEs (approximately 24.1 per cent of the total number). The latter contains data on 5.5 million SMEs (approximately 94 per cent of the total). Each of them contains information that is not available in the other, and vice versa, such as ownership, tax regime, affiliation with any legal entities, affiliation with non-profit organisations, foreign ownership, etc.

It is at the boundary of the divide between SMEs and "non-SMEs" that certain patterns are particularly noticeable, so it is important to note that in both the first and second databases it is possible to find companies that are not included in the Federal Tax Service's register, but actually belong to the SME sector in terms of revenue. According to the data for 2021, there were more than 114.6 thousand such companies in SPARK database and more than 495.8 thousand in Rusprofile. These companies "behave" as SMEs by their economic role and should be included in the analysis, albeit with appropriate caveats.

SPARK also found at least 400 companies that belong to the SME sector but have revenues of more than 2 billion roubles per year, i.e., above the permissible limit. These discrepancies are small but noticeable. They are probably due to errors in the process of submitting information and adding companies to or removing them from the relevant lists.

SPARK is the most "comfortable" database for quick testing of various hypotheses. It allows simultaneous uploading of information on many attributes (revenue, tax regime, belonging to the public sector, presence, or absence of an organisation in the SME register, etc.), but not more than 10,000 companies. Rusprofile cannot be used to upload a similar number of parameters. The register of SMEs of the Federal Tax Service of Russia allows to obtain data only on an individual SME, TIN, date of establishment and types of activities carried out.

Due to the above circumstances, the hypothesis was tested using SPARK data, and in the future such results should be rechecked on more complete data sets. Data for 2015 and 2021 were used in the calculations. All companies are ordered by revenue volume for the respective year and divided as follows:

First sample: 10 thousand SME companies with the highest revenue of those with annual revenue not exceeding RUB 2 billion (hereinafter referred to as the First sample; or SMEs up to RUB 2 billion).

Second sample: 10,000 non-SME companies with the highest annual revenue of those with annual revenue not exceeding RUB 2 billion (hereinafter — Second sample; or "non-SME" up to RUB 2 billion).

Third sample: 5,000 non-SME companies with the smallest annual revenues exceeding RUR 2 billion (hereinafter referred to as the Third sample; or non-SMEs over RUR 2 billion). This sample is half the size of the previous two samples, because the larger the companies, the fewer they are, and their revenues are many times higher than the threshold of RUR 2 billion. That is, the sample becomes too heterogeneous — we would get a comparison of SMEs with large and very large businesses. If we consider 5 thousand companies, the revenue indicators of the "top" and "bottom" of this list differ approximately 5 times in 2015 and approximately 1.5 times in 2021. The threshold of 5 thousand companies is set rather arbitrarily — we think that qualitative conclusions will not be affected, while quantitative ones can be refined by making estimates for different samples — 1, 2, 3 thousand companies, etc.

[8] URL: https://spark-interfax.ru/?ysclid=llc31zkrnu671771854 (accessed on 15.07.2023).

[9] URL: https://www.rusprofile.ru/?ysclid=llc32qb3bc996087374 (accessed on 14.07.2023).

SME companies with revenues of over RUB 2 billion, which are listed in SPARK (there are several hundred of them in 2015 and 2021), were not included in the samples under consideration. We believe that their absence will not distort the qualitative results, and it was more convenient to download information from SPARK in this way.

In addition, within these groups of companies, in some cases subgroups have been identified by industry, organisational, business, or other institutional characteristics.

The level of RUB 2 billion is taken as a threshold for classifying companies as SMEs: it is used to test whether the behaviour of companies changes when passing or approaching it.

More recent data are not yet available and can be included in the analysis as they become available. Then the changes in the SME sector after the external shocks in 2022 will become apparent. Subsequently, it is possible to carry out calculations for individual years of the study period, as well as up to 2014 — in order to clarify the relevant trends.

In addition, it is necessary to identify other samples (not only around RUB 2 billion of revenue per year) and analyse a broader population of companies not included in SPARK.

In calculations for this article, information on companies from SPARK was not cross-checked for known errors due to the labour-intensive nature of such work. In other studies, the authors have encountered situations where there was confusion, for example, with roubles and thousands of roubles. In the case of large samples, it is hoped that such errors are not regular and will not have a significant impact on the overall result.

No matching of the names or TINs of the companies in the 2015 and 2021 samples of the same name was checked — such a study could probably yield useful results, but has been postponed for now. The authors have assumed that the companies studied are more of a "place in the market" rather than an organisation with a name and history — those that have left are quickly replaced by others. This approach is acceptable in analyses of the highly competitive SME sector.

Table 2

Comparative analysis by revenue size of the first, second and third sample in 2015 and 2021

Samples	Revenue 2015 (RUB trillion)	Revenue 2021 (RUB trillion)	Annual average growth rate (in %)	Number of companies (units)	The smallest company in the sample by revenue (RUB mln)		The largest company in the sample by revenue (RUB mln)	
					2015	2021	2015	2021
First sample (SMEs — up to RUB 2 billion)	8.3	13.3	1.08	10 000	485	916	2000	2000
Second sample ("non-SME" — up to RUB 2 billion)	10.5	9.5	–1.07	10 000	516.4	333.0	2000	2000
Third sample ("non-SME" — over RUB 2 billion)	21.9	12.8	–1.09	5000	2000	2000	15 546.7	8976.3

Source: compiled by the authors.

The evaluation methodology is based on the comparison of geometric average growth rates (CAGR) of total revenues of the selected three samples of companies for 2021 in relation to 2015 (*Table 2*).

The results of the calculations presented in *Table 2* demonstrate that, firstly, the revenue of SMEs in the zone up to 2 billion roubles increases quite rapidly — its average annual growth is about 8%. Secondly, the average size of companies in this sample increases quite rapidly, and the lower threshold of the interval is "attracted" to the upper one: 10 thousand companies are located more densely — in the interval of 0.5–2.0 billion roubles — in 2015 and 0.9–2.0 billion roubles in 2021. Such indicators testify to the high dynamics of this segment — the number of organisations in the sample whose revenue exceeds, for example, 1 billion roubles per year, has grown several times over the period under review (from 2,329 in 2015 to 9,033 in 2021). Thirdly, the growth of revenue in the first sample looks even more significant against the background of its rapid decline in the second sample by 7% per year. This indicates a quantitative reduction and "erosion" of this segment. Such different dynamics of the characteristics of the two samples can hardly be explained only by the fact that the first one has state support and the second one does not. Perhaps the greater importance of "non-SME" companies compared to SMEs on the decline can be explained by the fact that the former appear immediately with high revenues (e.g. about 0.5 billion roubles per year) and are recorded as SMEs with a delay. They may be formed either as someone else's subsidiaries or as a result of splitting up enlarged SMEs that have reached the two billion threshold (in these cases, it is unlikely that organisations of a very small size are created). There are probably other explanations for this.

The phenomenon of the high difference in growth rates between the first and second samples requires a closer economic analysis. In any case, it indirectly confirms very dynamic institutional transformations of the SME sector in the "pre-threshold" zone — up to 2 billion roubles of revenue per year.

Important features of SMEs' behaviour in the "near-threshold" zone become visible when comparing the first and third samples — SMEs up to 2 billion roubles and "non-SMEs" over 2 billion roubles, presented in *Table 2*. In the latter, revenue declines sharply, by an average of 9% per year. This result confirms the assumption that SMEs approaching the threshold of RUR 2 billion are split into smaller companies or absorbed by much larger ones. The direct transition of SMEs into "non-SMEs" is relatively rare.

Table 3 shows data on the first sample, disaggregated and itemised by industry sector affiliation.

The data on the rates in *Table 3* are very different. The number of companies from different industries in the sample also differs significantly. The smaller the number of companies, the less representative the industry data are. Nevertheless, in some rows there are several hundreds of companies, and the variation of growth rates for them ranges from large negative to large positive values.

To clarify and confirm such estimates for the "agriculture" sector, we constructed samples from SPARK for 10 thousand largest SMEs in this sector for 2015 and 2021 with revenues up to 2 billion roubles. The calculations showed that the revenue over 6 years increased from RUB 0.95 billion in 2015 to RUB 1.898 billion in 2021. The average annual increase was more than 12%. At the same time, the average duration of their existence in 2021 decreased from approximately 21 years to 18 years, indicating the sustainability of the set of companies under consideration.

Similar calculations can be made for other industries.

There is a considerable variation in growth rates not only by industry, but also by other characteristics available for analysis that are not presented in the article, such as SMEs' affiliation with large companies. Here we only note the existence of such a dispersion and its significance.

It is difficult to obtain direct estimates of the affiliation of SME companies with large businesses, as most of them have founders who are individuals. Only about 20 per cent of SME companies in the SPARK sample have founders who are legal entities. The practice when managers of large companies set up small companies in their own name with similar activities is very common. Assessing the extent of such indirect dependence of SMEs on large businesses requires more thorough research. Nevertheless, known cases confirm that this practice is very likely to be widespread.

More informed conclusions can be drawn from a thorough study of the composition of SMEs by industry, size, and other characteristics. *Table 3* illustrates that the problem is worth investigating — the dispersion of growth rates across industries is high, including for lines with a significant number of firms. Consequently, there are groups of SMEs (including manufacturing) where revenue is growing at a very high rate.

Thus, the "borderline" layer of companies (from about 0.5 or 1 to the threshold of 2 billion roubles of revenue per year) is filled with a kind of "life" not like what happens in smaller SMEs — companies are growing quite noticeably and their number is increasing.

Speaking about the borderline layer of companies, inflation should be taken into account. Over the analysed period, it amounted to 49% (average annual growth topics — 5.86%). As a result, it became easier for companies to reach the threshold level simply because of the growth of prices for products. The borderline layer is objectively narrowing, and the intensity of processes in it is increasing: companies have to make faster decisions on business fragmentation, separation of separate business processes into independent firms, as well as on mergers and acquisitions with larger organisations.

Maintaining the two billion threshold for a long time leads to SMEs becoming shallow. It should probably be raised regularly. For example, since 2015,[10] when it was set at its current level and size, it should have been raised to 2.5–3 billion roubles per year by now. Failure to raise it would mean a deliberate policy of narrowing SME opportunities.

To summarise, within the framework of the theory of economic dominance in a multilevel economy, it appears that SMEs give part of their revenues to big businesses that are thereby gaining institutional rent due to their institutional advantages over SMEs. That is, SMEs are embedded in the value chains of big Russian or foreign businesses (including offshore business) that are absorbing the dynamic growth of SMEs.

An analysis of the state and dynamics of the SME sector in the zone of the "pre-threshold" level of RUB 2 billion (above which a company should no longer be classified as an SME) has shown high mobility of this segment, caused, among other things, by the fragmentation of companies into smaller ones.

In the "pre-threshold" zone, SME companies' revenue growth for the period 2015–2021 was about 8% per year. In the zone from 2 to about RUB 10 billion of revenue per year, the growth rate is negative — approximately — 9% per year. Subsidiaries or companies being absorbed by large businesses are likely to have larger companies as parent companies — those with revenues over 10 billion roubles per year. Since the Russian economy is growing mainly in the segment of big business, it can be assumed that it is in its favour that the income from SME development is redistributed, and thus it receives institutional rent. A gap of 5–10 times or more between parent and subsidiary companies is natural for business.

The question of whether the entire SME sector or only its "pre-threshold" zone is growing rapidly needs to be verified. Even within the latter, there are significant differences between companies in different sectors or with different institutional status, including dependence on large companies or the presence of foreign businesses among their owners. It is also necessary to investigate the dynamics of SMEs in the vicinity of thresholds that limit the receipt

[10] URL: https://www.garant.ru/products/ipo/prime/doc/71034484/

Table 3

Analysis of the structure of the first sample (SMEs up to RUB 2 billion) by the size of company revenues detailed by industry in 2015 and 2021

Name of industry	Revenue 2015 (trillion RUB)	Revenue 2021 (trillion RUB)	Average annual growth rate (in %)	Number of companies, 2015 (units)	Number of companies, 2021 (units)	Smallest of 10,000 in terms of revenue (RUB million)		Average company size by revenue (RUB billion)	
						2015	2021	2015	2021
Agriculture, forestry, hunting, fishing, and fish farming	0.177	0.263	6.82	231	203	489.6	952.3	0.768	1.295
Mining and quarrying	0.072	0.097	5.09	92	72	487.5	951.9	0.782	1.348
Manufacturing industries	1.245	2.011	8.32	1520	1503	485.5	952.3	0.819	1.338
Supply of electricity, gas, and steam; air conditioning	0.087	0.079	–1.59	106	60	490.0	954.3	0.822	1.318
Water supply, wastewater disposal, organisation of waste collection and disposal, pollution elimination activities	0.049	0.187	25.01	63	140	490.7	952.8	0.792	1.342
Construction	1.047	1.292	3.57	1226	982	486.1	952.0	0.854	1.316
Wholesale and retail trade; repair of motor vehicles and motorbikes	4.375	7.670	9.81	5255	5717	485.3	951.7	0.833	1.341
Transport and storage	0.257	0.610	15.50	305	467	485.4	952.1	0.844	1.307
Hotel and catering activities	0.058	0.082	5.94	71	59	488.0	958.4	0.825	1.402
Information and communication activities	0.124	0.200	8.29	165	162	485.3	952.3	0.753	1.235
Financial and insurance activities	0.127	0.094	–4.89	138	69	487.0	968.6	0.925	1.364
Activity on operations with real estate and immovable property	0.302	0.242	–3.17	381	192	485.4	954.8	0.794	1.261

Table 3 (continued)

Name of industry	Revenue 2015 (trillion RUB)	Revenue 2021 (trillion RUB)	Average annual growth rate (in %)	Number of companies, 2015 (units)	Number of companies, 2021 (units)	Smallest of 10,000 in terms of revenue (RUB million)		Average company size by revenue (RUB billion)	
						2015	2021	2015	2021
Professional, scientific, and technical activities	0.275	0.359	4.54	326	276	485.7	953.6	0.845	1.303
Administrative activities and related ancillary services	0.061	0.082	5.05	74	60	486.5	974.6	0.812	1.375
Education	0.002	0.001	–10.91	2	1	521.6	1412.3	1.048	1.412
Activities in the field of health care and social services	0.011	0.031	18.85	15	24	486.6	951.6	0.702	1.293
Activities in the field of culture, sports, leisure, and entertainment activities	0.010	0.008	–3.65	15	6	516.8	1016.3	0.695	1.279
Provision of other services	0.015	0.009	–8.16	16	7	528.4	1039.0	0.938	1.255
Total	8.3	13.3	8.0	10000	10000	485	916	0.830	1.333

Source: compiled by the authors.

of relevant state support to small businesses, micro-enterprises; or to distinguish between individual entrepreneurs (sole proprietors) and the self-employed.

The perception of the SME sector as a vulnerable segment requiring state care, without which its companies will not be able to compete in the economy, is erroneous — it is very dynamic and distinctive and acts as a "nutrient broth" for big business. It should be clearly understood that aid to small and medium-sized businesses is often redistributed in favour of large businesses through price mechanisms or subsidiary and parent company relations. Perhaps this is what government policy is all about, but then it should be assessed from this perspective.

To the extent that the state develops small business specifically, it is necessary to identify barriers and focus state support on helping to overcome them, to support not the companies themselves, but financial, marketing, consulting infrastructures, as well as legal and information services.

The obtained data on dynamic changes in the SME sector should be used in the development of forecast scenarios, taking into account the adaptation processes and institutional restructuring currently taking place in the Russian economy. In the context of increased risks and costs associated with the transformation of the activities of the largest domestic businesses in foreign markets, the development of large and medium-sized businesses in domestic markets is becoming one of the main drivers of economic growth. For SMEs, this means increasing competition for dominance over them

by large businesses, which will be interested in "pulling" SME companies under their control by creating favourable working conditions for them, such as better ecosystems. Thus, SMEs will be expanding.

At the same time, government policy should more actively encourage SMEs to establish close ties with large companies, create and expand networks to concentrate investments in common goals for them.

REFERENCES

1. Medovnikov D., Oganesyan T., Rozmirovich S. Candidates for the championship: Medium-sized high growth companies and state-run programs for their support. *Voprosy ekonomiki*. 2016;(9):50–66. (In Russ.). DOI: 10.32609/0042–8736–2016–9–50–66
2. Zemtsov S.P., Tsareva Y.V., Salimova D.R., Barinova V.A. Small and medium-sized enterprises in Russia: In search of the employment growth factors. *Voprosy ekonomiki*. 2021;(12):66–93. (In Russ.). DOI: 10.32609/0042–8736–2021–12–66–93
3. Vilenskii A.V. Features of small and medium-sized enterprises in Russia. *Ekonomika: vchera, segodnya, zavtra = Economics: Yesterday, Today and Tomorrow*. 2014;(6–7):26–45. (In Russ.).
4. Lyashok V. Yu., Maleva T.M., Lopatina M.V. Impact of new technologies on the labor market: Past lessons and new challenges. *Ekonomicheskaya politika = Economic Policy*. 2020;15(4):62–87. (In Russ.). DOI: 10.18288/1994–5124–2020–4–62–87
5. Glukhov K.V., Chebashev I.A., Mikhalevsky A.V. Efficiency analysis of state support measures for the small and medium-sized business sector in Russia during the pandemic. *Vestnik universiteta (Gosudarstvennyi universitet upravleniya)*. 2021;(6):5–13. (In Russ.). DOI: 10.26425/1816–4277–2021–6–5–13
6. Zemtsov S.P. Institutions, entrepreneurship, and regional development in Russia. *Zhurnal Novoi ekonomicheskoi assotsiatsii = Journal of the New Economic Association*. 2020;(2):168–180. (In Russ.). DOI: 10.31737/2221–2264–2020–46–2–9
7. Gritsunova S.V., Lotareva C.M. Development of small business in Russia. *Mir nauki = World of Science*. 2015;(2):34. URL: http://mir-nauki.com/PDF/07KMN 215 (In Russ.).
8. Nikitina L.N., Khudilainen M.I. The formation of small business in Russia. *Innovatsii = Innovations*. 2006;(9):63–67. (In Russ.).
9. Barinova V.A., Zemtsov S.P., Tsareva Y.V. Entrepreneurship and institutions: Does the relationship exist at the regional level in Russia? *Voprosy ekonomiki*. 2018;(6):92–116. (In Russ.). DOI: 10.32609/0042–8736–2018–6–92–116
10. Rakhmanova M.S. Problems of development of small and medium-sized businesses in the Russian Federation. *Territoriya novykh vozmozhnostei. Vestnik Vladivostokskogo gosudarstvennogo universiteta ekonomiki i servisa = Territory of New Opportunities. Bulletin of the Vladivostok State University of Economics and Service*. 2021;13(3):53–61. (In Russ.). DOI: 10.24866/VVSU/2073–3984/2021–3/053–061
11. Obraztsova O.I., Chepurenko A. Yu. SME policy in the Russian Federation: Renewal after the pandemic? *Voprosy gosudarstvennogo upravlenia = Public Administration Issues*. 2020;(3):71–95. (In Russ.). DOI: 10.17323/1999–5431–2020–0–3–71–95
12. Dakhnenko S.S., Vengerovskiy E.L. Some issues of improving the current legislation in the field of financial support and lending to small and medium-sized enterprises. *Teoria i praktika obtshestvennogo razvitia = Theory and Practice of Social Development*. 2020;(1):111–116. (In Russ.). DOI: 10.24158/tipor.2020.1.18
13. Pokida A.N., Zybunovskaya N.V. Self-employment in contemporary labor market. *Sotsial'no-trudovye issledovaniya = Social & Labour Research*. 2019;(3):18–29. (In Russ.). DOI: 10.34022/2658–3712–2019–36–3–18–29
14. Blokhin A.A. Economic dominance: Basic provisions of theory and measurement approach. *Nauchnye trudy: Institut narodnokhozyaistvennogo prognozirovaniya RAN = Scientific Articles: Institute of Economic Forecasting. Russian Academy of Sciences*. 2023;21(1):6–30. (In Russ.). DOI: 10.47711/2076–3182–2023–1–6–30

15. Blokhin A.A. Economy of unnecessary output (institutional characteristics of the circuit of losses). *Ekonomicheskaya politika = Economic Policy*. 2015;10(1):7–40. (In Russ.).
16. Polterovich V.M. Institutional traps and economic reforms. *Ekonomika i matematicheskie metody = Economics and Mathematical Methods*. 1999;35(2):3–20. (In Russ.).
17. Bourdieu P. Social space: Fields and practices. Transl. from French. St. Petersburg: Aletheia; Moscow: Institute of Experimental Sociology; 2005. 576 p. (In Russ.).
18. Fligstein N. The architecture of markets: An economic sociology of twenty-first-century capitalist societies. Princeton, NJ: Princeton University Press; 2002. 288 p. (Russ. ed.: Fligstein N. Arkhitektura rynkov. Ekonomicheskaya sotsiologiya kapitalisticheskikh obshchestv XXI veka. Moscow: HSE Publ.; 2013. 392 p.).
19. Radaev V.V. Perspective of the new institutionalism: Constructing an analytical scheme. *Zhurnal sotsiologii i sotsial'noi antropologii = The Journal of Sociology and Social Anthropology*. 2001;4(3):109–130. (In Russ.).
20. Williamson O.E. The economic institutions of capitalism: Firms, markets, relational contracting. New York, NY: The Free Press; 1985. 468 p. (Russ. ed.: Williamson O.E. Ekonomicheskie instituty kapitalizma: firmy, rynki, "otnoshencheskaya" kontraktatsiya. St. Petersburg: Lenizdat; 1996. 702 p.).

ABOUT THE AUTHORS

Andrey A. Blokhin — Dr. Sci. (Econ.), Chief Researcher at the Institute of Economic Forecasting of the Russian Academy of Sciences, Professor at the Financial university, Moscow, Russia
https://orcid.org/0000-0003-2132-4664
Corresponding author:
andraleks@rambler.ru

Konstantin V. Glukhov — applicant at the Institute of Economic Forecasting RAS, Moscow, Russia
https://orcid.org/0000-0002-3305-1643
konstantinglukhov@gmail.com

Conflicts of Interest Statement: The authors have no conflicts of interest to declare.

The article was received on 11.11.2024; revised on 08.02.2024 and accepted for publication on 15.03.2024. The authors read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-116-125
UDC 65.012.123(045)
JEL O31

Modeling the Management of Patent Activity of Economic Entities

A.V. Gulay[a], A.I. Gourko[b], T.A. Sakhnovich[c], S.V. Yudina[d]
[a,b,c] Belarusian National Technical University, Minsk, Belarus;
[d] Kazan National Technical University named after A.N.Tupolev – KAI Kazan, Russia

ABSTRACT

Ratings of the inventive patent activity of researchers in the Republic of Belarus indicate the need to significantly increase the number of filed and registered patents in national and foreign authorities. In this regard, it is necessary to create mechanisms for managing the patent activity of business entities as the foundation for the innovative development of the country's national economy. In this article, the authors identify specific steps to link the management of patent activity with the strategic goals of the entire economic entity. This allows you to experience real economic benefits and make the process of increasing patent activity economically justified. A strategic map for managing the patent activity of an economic entity is proposed as a model. Each goal is associated with indicators that measure the degree of its achievement and determine development prospects. The main stages of creating such a control system are considered.

Keywords: economic object; business entity; patent activity; modeling; management and control system

For citation: **Gulay A.V., Gurko A.I., Sakhnovich T.A., Yudina S.V. Modeling the management of patent activity of economic entities.** ***The world of new economy.*** **2024;18(1):116-125. DOI: 10.26794/2220-6469-2024-18-1-116-125**

INTRODUCTION

The level of innovation in a country is best assessed by the *Global Innovation Index* proposed by the Boston Consulting Group, where patent activity is an important factor.

To measure the quantitative results of research and development with significant technical and technological innovations, patent statistics are used, based on data on the registration of inventions as the results of research and development.

The most important absolute indicators of patenting of inventions include:

- *the number of patent applications filed;*
- *the total number of patents granted,* including to domestic and foreign applicants.

For a long period in the Republic of Belarus there was some growth in the inventive activity of national applicants (*Fig. 1*), but it dropped significantly after a significant increase in the amount of patent fees for inventions in 2014.

The coefficient of inventive activity, calculated as the number of patent applications per 10,000 population, has increased by about 3 times over 20 years and amounted to 1.9 in 2012, falling to 0.6 in 2018, which led to a significant deterioration of Belarus' position in the Global Innovation Index [1].

In the ranking of patent activity of the world's countries issued by the World Intellectual Property Organisation (WIPO), the Republic of Belarus ranked 62nd in 2022 (total applications — 393; resident applications — 298; non-resident applications — 95).[1]

Due to the particular specificity of research labour and its results, the potential of inventive activity is a complex object of study and management, so it is advisable to use a different set

[1] Ranking of the world's countries by number of patents. Humanitarian portal. URL: https://gtmarket.ru/ratings/world-patent-ranking (accessed on 10.12.2023).

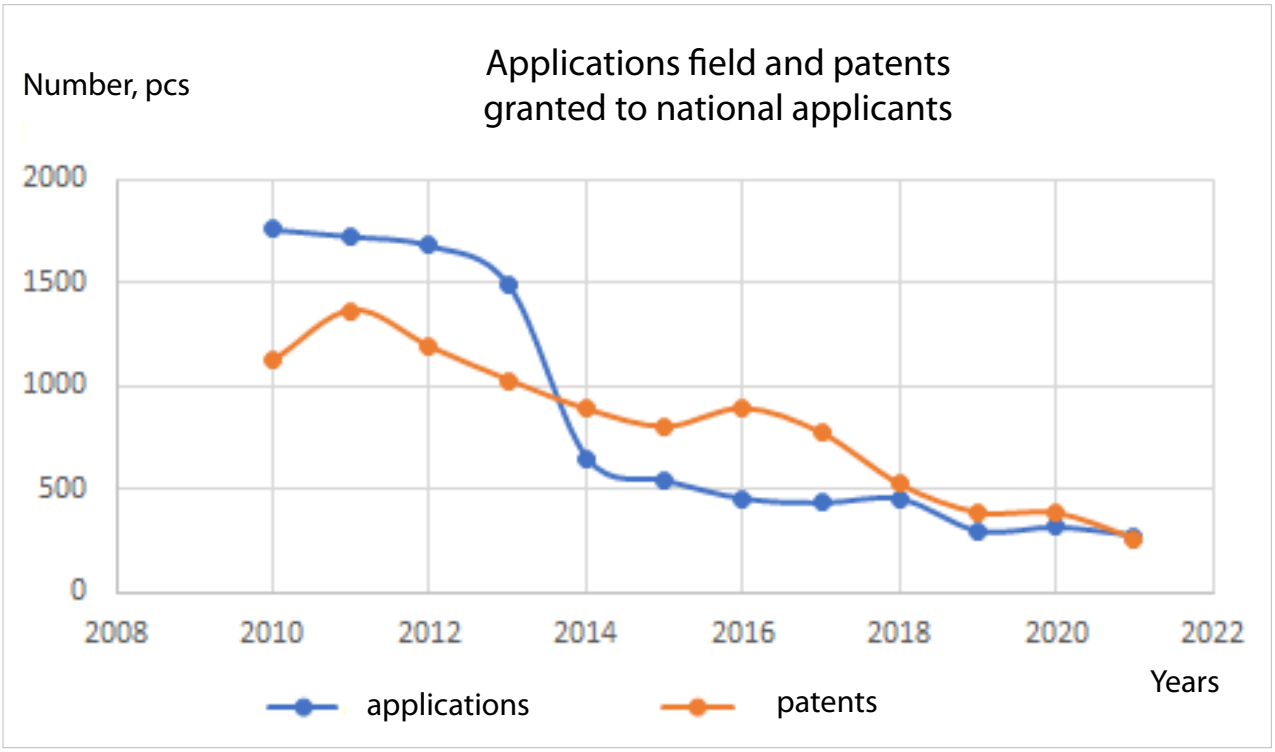

Fig. 1. **Time series of patent activity in the Republic of Belarus**

Source: URL: https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public_compilation/index_10865/; https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public_compilation/index_18023/; https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public_compilation/index_57394/

(combination) of models, methods and indicators for assessing this activity.

Hypothesis 1: The number of filed patent applications (and granted patents) is determined by a certain number of simultaneously and cumulatively acting factors.

This fact can be represented in the form of a multiple regression equation, which has the following form:

$$y = f(x_1, x_2, \ldots, x_n) + \varepsilon,$$

where y — is the number of patent applications filed (dependent variable); $x_1, x_2, \ldots, x_n$ — are the factors affecting y (independent variables); ε — is the random error.

The general formulation of the multiple regression problem is as follows:

- according to the available data of n observations of the change in the number of patent applications filed (attribute y), depending on the sets of values of the factors $x_1, x_2, \ldots, x_n$ select an econometric model:

$$y = f(x_1, x_2, \ldots, x_n) + \varepsilon;$$

- estimate its parameters and statistically justify that the factors $x_1, x_2, \ldots, x_n$ are significant, and the constructed function $f(x_1, x_2, \ldots, x_n)$ corresponds most accurately to the observational data.

Defining a multiple regression model involves solving two problems:

- selection of independent variables $x_1, x_2, \ldots, x_n$, affecting the number of filed inventions applications;
- selection of the form $f(x_1, x_2, \ldots, x_n)$ of y dependence on the variables $x_1, x_2, \ldots, x_n$.
- In this case, it is necessary that the factors $x_1, x_2, \ldots, x_n$, included in the model themselves:
- were quantifiable;
- closely related to the effective feature of the outcome;
- not correlated with each other.

If the latter requirement is violated, it is impossible to determine the individual influence of individual regressors $x_1, x_2, \ldots, x_n$ on the result y, which is important for forecasting and making control decisions.

Quantifiable data on R&D in the Republic of Belarus are presented in the *Table 1* below.

The multivariate regression model based on the data in the table is as follows:

$$y = 1864 - 14,743x_1 + 0,06x_2 - 7487x_3 + 9248x_4 + 2,09x_5.$$

It should be noted that there are no other reliable data in open sources characterising patent activity.

Our research shows that the **coefficients of determination** R^2 (the share of the dependent variable explained by the regression model of dependence on the explanatory variables) of the factors available for analysis do not exceed the value of 0.6. This indicates that it is impossible to build an adequate regression model based on the available data, which are not statistically related to the number of filed invention applications.

In order to identify the factors that really influence the number of patent applications filed by national applicants, let us look at the experience of other countries. Let us note a few important points.

The number of patent applications is directly related to *the expenditure on fundamental and applied research and development*. They include commercialisation of the results of scientific and technological activities, which is impossible without proper registration of protection documents. Countries with a high level of investment in scientific research are characterised by a high value of the CIA (coefficient of inventive activity), defined as the number of invention applications filed by domestic applicants with the country's patent office per 10,000 people. [2]. The level of R&D expenditures in some countries of the world is shown in *Table 2*.

The initially low level of R&D expenditure is responsible for the decline in the number of invention patent applications filed in the country by national applicants. Not only *high salaries* but also *incentives for the design of a particular invention* allow to increase inventive activity.

Writing the patent application itself, which is subject to strict rules of formatting, causes certain difficulties for developers. In order to

Table 1

Data on scientific research and innovation in the Republic of Belarus

Year	y	$y`$	x_1	x_2	x_3	x_4	x_5
2010	1759	1126	468	31712	0.3	0.67	324
2011	1725	1365	501	31194	0.25	0.68	443
2012	1681	1186	530	39437	0.24	0.65	437
2013	1489	1027	482	28937	0.3	0.65	411
2014	652	887	457	27208	0.24	0.51	383
2015	543	803	439	26153	0.24	0.5	342
2016	455	892	431	25942	0.27	0.5	345
2017	434	772	454	26483	0.34	0.59	347
2018	454	524	455	27411	0.39	0.6	380
2019	298	388	460	27735	0.34	0.59	405
2020	317	386	451	25622	0.32	0.54	447
2021	276	263	445	25644	0.29	0.47	448

Note:

y – number of applications for patenting inventions filed by national applicants (pcs.);

$y`$ – number of patents for inventions issued to national applicants (pcs.);

x_1 – number of organizations performing research and development (pcs.);

x_2 – number of personnel engaged in research and development (persons);

x_3 – financing of science from the republican budget (in % of GDP);

x_4 – internal expenditures on research and development (in % of GDP);

x_5 – number of organizations that carried out technological innovations (pcs.)

Source: URL: https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public_compilation/index_10865/; https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public_compilation/index_18023/; https://www.belstat.gov.by/ofitsialnaya-statistika/publications/izdania/public_compilation/index_57394/

Table 2

The level of spending on R&D in some countries of the world

Country	The level of expenditure on R&D (as a % of GDP) by years					
	2013	2014	2015	2016	2017	2018
Belarus	0.65	0.51	0.50	0.50	0.58	0.61
China	2.00	2.03	2.07	2.12	2.15	2.19
Russia	1.03	1.07	1.10	1.10	1.11	0.99
USA	2.71	2.72	2.72	2.76	2.82	2.84

Source: compiled by the authors according to: URL: https://gtmarket.ru/ratings/research-and-development-expenditure.

conduct a patent search to identify the patentability of a technical solution, a developer must:

- be able to work with patent databases;
- have skills of formalising the description of the development, writing correct claims;
- know the rules of filing an application, especially for foreign patent offices.

For this purpose, it is necessary to engage professional patent attorneys, whose number is insufficient and their services are expensive.

The financial component of patenting should be noted:

- lack of funds of individual inventors, start-ups and small companies does not allow them to patent their inventions in a timely manner;
- the prospects of obtaining a targeted financial result are rather weak;
- implementation implies certain difficulties;
- revenues from commercialisation of rights to the results of inventive activity will not be received immediately.

The specificity of the origin of intellectual property objects is that they are the results of intense intellectual labour mainly of individual researchers, and they are inseparable from their creators [3]. Creativity is an environment of purely individual activity. It is necessary to make a clear distinction between the labour of generating a creative result and contributing to such a result. The basis for the emergence of the right is only a personal contribution — the new thing that is made by the creator [4].

Keeping the invention secret should not be favourable to the inventor. In a market economy, the use of intellectual property objects gives the researcher an opportunity to obtain additional income from monopoly on new technologies, sale of patents and licences. The sale of the right to use the invention should cover the direct costs of its creation and the transaction costs of specification of property rights. The creator must be able to recoup the costs incurred and have incentives (including rents) to continue his intensive and complex activities [5].

The costs of the inventor and other interested agents can be attributed to specific, often unrecoverable (for example, due to imperfect legislative protection) investments. The underdevelopment of the market of intellectual products, the lack or incompleteness of information on transactions with such complex products create the problem of adequate assessment of their market value, and, therefore, the receipt of income and the existence of incentives for their creation.

Hypothesis 2. In order to increase the number of patents applied for and registered in the country, it is necessary to develop adaptive mechanisms for managing the patent activity of economic entities and implement them in the system of regular management.

In order to do this, the following *tasks* must be done sequentially:

1. Identify the *management object* from the environment, as which we will consider the patent activity of the business entity.

2. Determine the *objectives of the management system*.

The management system of patenting activity of a business entity is created in order to achieve an economically justified number of declared and registered patents.

3. To outline the *objectives of the research*. This is the development of internal mechanisms for increasing the patent activity of economic entities and the application of management tools embedded in regular management on their basis.

4. Identify the *functions of patenting activities* of business entities. These include:

- determination of needs;
- motivation;
- goal setting;
- selection of technologies to achieve the maximum possible number of patents applied for and registered.

5. *To set objectives* to achieve the goals of patenting activities, including:

- selection of forms, methods and means;
- obtaining the planned results in the form of filed applications and granted patents;

• diagnostics of the obtained results of patent activity;

• reflexion depending on the obtained results.

In order to realise the *management of patenting activity*, a special structural unit of the economic object (e.g., patent office) is required, which is responsible for the consistent performance of the following functions:

• information gathering;

• planning;

• implementation (including organisation and monitoring of implementation);

• diagnostics (accounting, control, analysis of the results obtained);

• regulation (including adaptation processes) within the business entity.

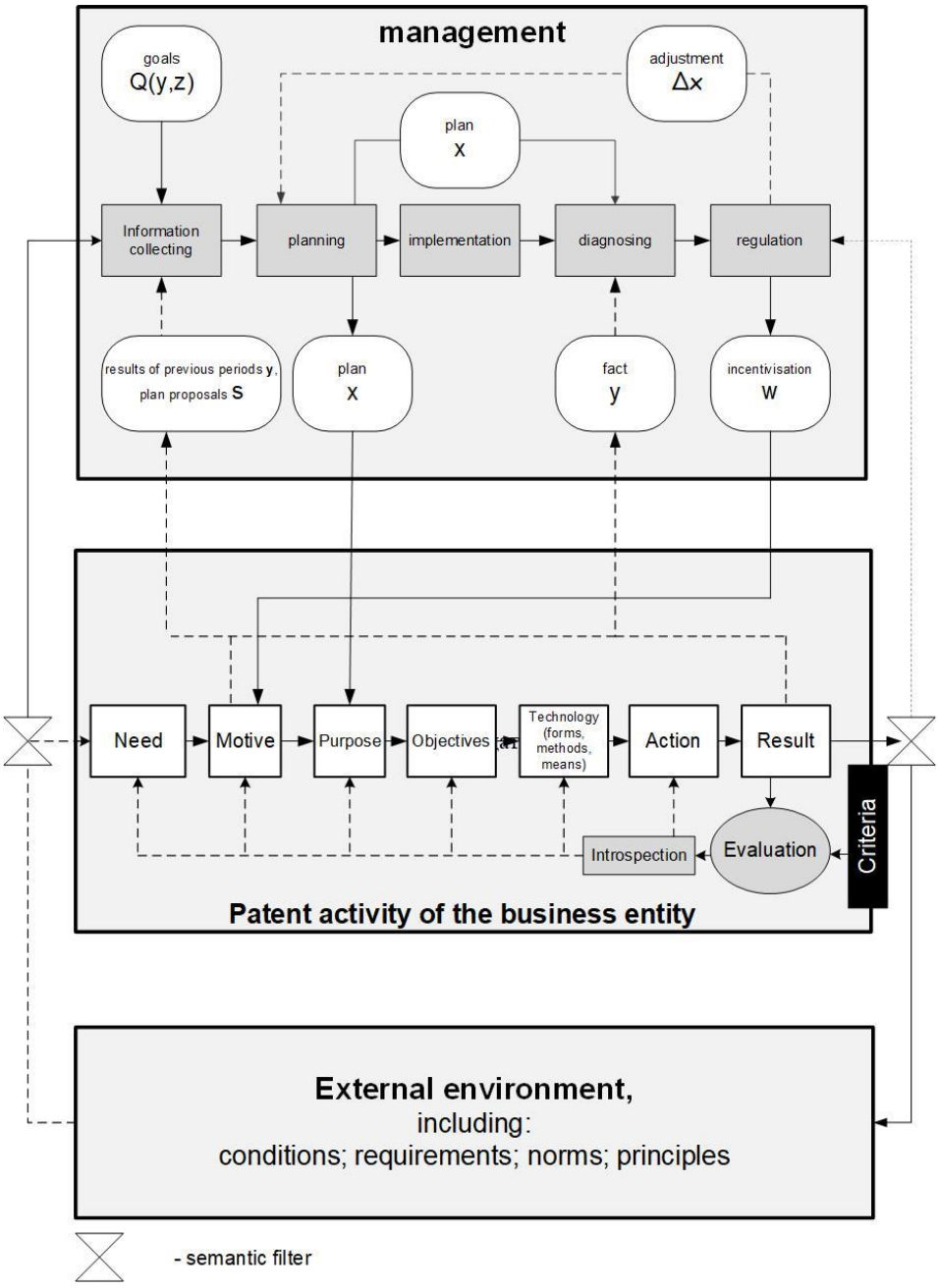

Fig. 2. **Mental model of the control system patent activity of an economic object**

Source: compiled by the authors.

To determine the *interrelationships and interdependencies* between the elements of the patent activity management system and the external environment.

The structure of the patent activity management system can be presented as a private mental model of the third level management (*Fig. 2*).

As the external environment of the patent activity management system, it is advisable to consider the supersystem representing the general, regular management of the business entity, as well as the state management system, which creates conditions for commercialisation of rights to the results of intellectual activity (RIA).

Let us analyse the economic aspect of increasing the patent activity of economic entities.

Innovations as a result of implementation of patents of own development are realised in the economic entity itself. In addition, patents are sold in order to become innovations in the sphere of consumption. Therefore, patents can be developed both for own needs (implementation in own production or accumulation) and for sale.

A patent can become:

- accumulation in an economic object;
- innovation in an economic object;
- object of sale as a commodity.

The efficiency of patent activity of an economic entity is expressed through economic and financial indicators. In the conditions of market relations there cannot be a unified system of indicators. Each investor determines it independently, based on the peculiarities of the innovation project, professionalism of specialists, managers and other factors.

In fact, if we take into account only the final results of implementation or sale of patents, this activity can be estimated in value terms.

The increase of patent activity should be linked to the strategic goals of the economic object. This will allow to feel real economic benefits and make this process economically justified [6].

Comprehensive consideration of patent activity of an economic entity allows to:

- formulate strategic goals of an economic object;
- to select indicators assessing the impact of patent activity on the achievement of strategic goals;
- to develop strategic measures in several directions that really influence patent activity and ensure it.

At that, the development of the patent activity management system is carried out within the framework of reengineering of business processes of the economic object and includes the following steps:

- specification of strategic goals of the economic object;
- linking strategic objectives by cause-and-effect chains (building a strategic map);
- selection of indicators and determination of their target values;
- determining the connection of indicators with business processes;
- development of strategic measures to increase patent activity;
- cascading, spreading the strategy to all management levels;
- integration of the patent activity management system into the management system of the economic object, for example, with the help of *Business Studio*.[2]

DISCUSSION OF THE RESULTS

An example of a strategic map of patent management of a business entity is shown in *Fig. 3*.

Fig. 3 presents strategic objectives describing planned results and cause-and-effect relationships between individual objectives. For each objective one or more development directions are specified and the indicators — measures of the degree of its achievement — are given, providing management with timely signals based on deviations of the real state of affairs from the planned one, i.e. the actual quantitative results obtained are compared with the planned ones.

[2] Documentation of Business Studio. URL: www.businessstudio.ru/wiki/docs/v5.1/doku.php/ru/start (accessed on 10.12.2023).

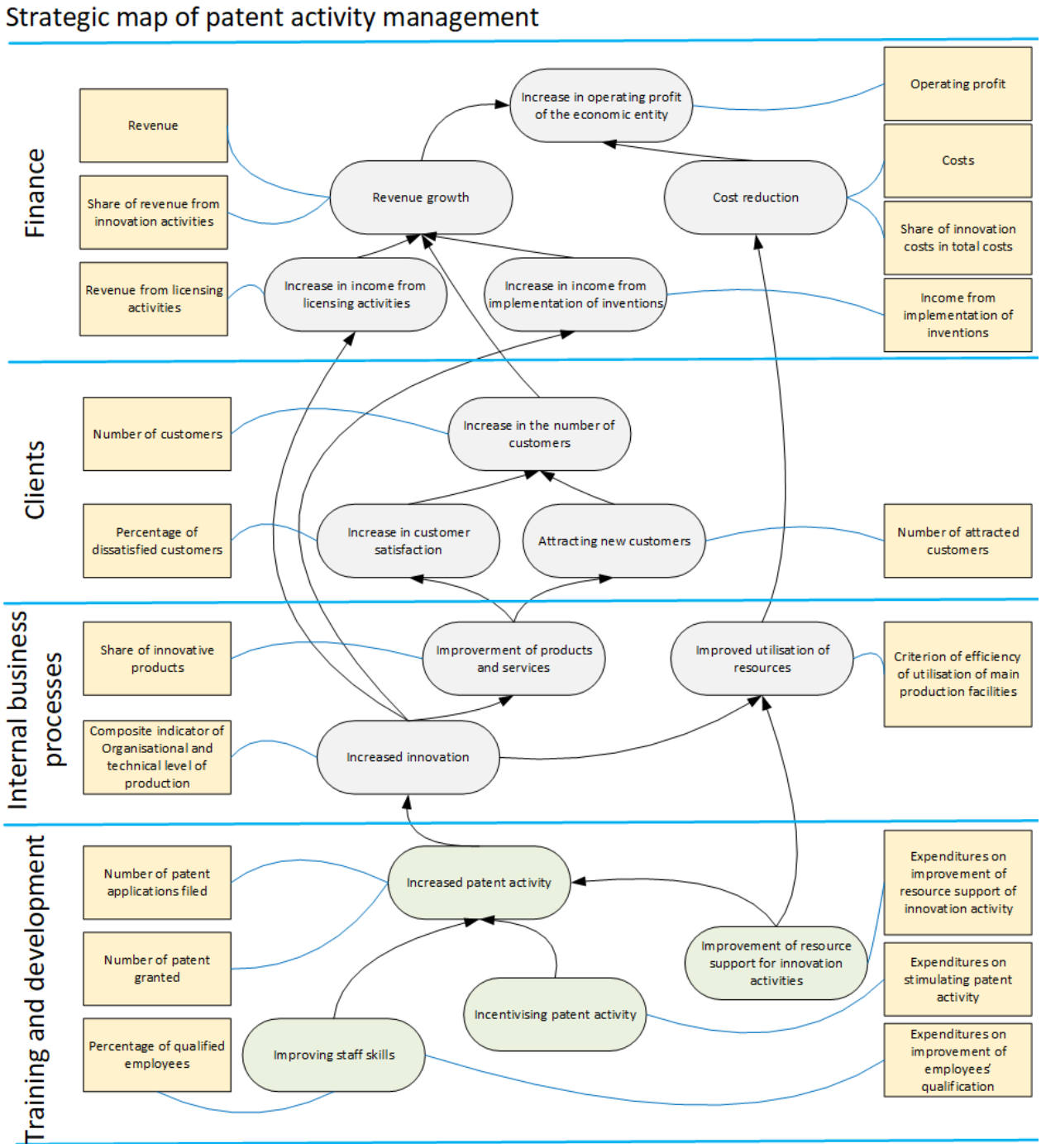

Fig. 3. **Strategic map of managing the patent activity of an economic objects**

Source: compiled by the authors.

The indicators in the patent activity management system simultaneously serve to assess both the efficiency of business processes and the degree of goal achievement.

The sequence of designing the patent activity management system of an economic entity is as follows:

- formulation of the highest goal of the economic entity;
- development of a strategy for its achievement;
- formation of the upper level of the system of objectives and indicators;

• definition of management objects (economic entities);
• development of a model of business processes, formation of the lower level of the system of goals and indicators;
• designing the organisational structure;
• formation of regulatory and methodological documentation;
• automation of the management system (if necessary).

The process approach is used to describe management activities.

CONCLUSIONS

According to the data of the State Statistics Committee of the Republic of Belarus, for a long period of time there has been some growth in the inventive activity of national applicants, but patent activity in the country has recently declined markedly.

The authors' research shows that it is impossible to build an adequate regression model based on the available data, which are not statistically related to the number of filed invention applications.

The considered factors affecting patent activity indicate an initially low level of R&D expenditures, which causes a decrease in the number of patent applications filed in the country by national applicants.

The mental model of the third level of management of economic entities provides a sequence of tasks in the design of the patent activity management system.

Its enhancement should be linked to the strategic goals of the whole economic entity.

The general approach outlined in the paper can be used in the creation of the patent activity management system of any economic entity.

REFERENCES

1. Vityaz P., Nechepurenko Yu. National intellectual property management system. *Nauka i innovatsii = The Science and Innovations*. 2020;(4):4–13. (In Russ.).
2. Dyachenko O., Tuzova S., Ishchenko A.A. Patenting activity support: Foreign experience. *Intellektual'naya sobstvennost'. Promyshlennaya sobstvennost' = Intellectual Property. Industrial Property.* 2022;(5):3–20. (In Russ.).
3. Mia Shuk Chun Lam. The granting of intellectual property rights and their effect on the promotion of future innovation and creativity. *The King's Student Law Review*. 2015;6(1):1–12. URL: https://blogs.kcl.ac.uk/kslr/wp-content/blogs.dir/86/files/2015/05/Mia-Shuk-Chun-Lam.pdf
4. Aghion P., Cai J., Dewatripont M., Du L., Harrison A., Legros P. Industrial policy and competition. *American Economic Journal: Macroeconomics*. 2015;7(4):1–32. DOI: 10.1257/mac.20120103
5. O'Connor S.M. Distinguishing different kinds of property in patents and copyrights. *SSRN Electronic Journal*. 2020. DOI: 10.2139/ssrn.3565272
6. Kaplan R.S., Norton D.P. The balanced scorecard: Translating strategy into action. Boston, MA: Harvard Business School Press; 1996. 336 p. (Russ. ed.: Kaplan R.S., Norton D.P. Sbalansirovannaya sistema pokazatelei. Ot strategii k deistviyu. Moscow: Olymp-Business; 2003. 216 p.).

ABOUT THE AUTHORS

Anatoli V. Gulay — Cand. Sci. (Techn.), Associate Professor, Head of the Department of Intelligent and mechatronic systems, Belarusian National Technical University, Minsk, Republic of Belarus
https://orcid.org/0009-0006-1368-2196
avgulay@bntu.by

Alexandre I. Gourko — Cand. Sci. (Techn.), Associate Professor of the Department of Engineering Economics, Department of Mechanical Engineering, Belarusian National Technical University, Minsk, Republic of Belarus
http:/orcid.org/0000-0002-1042-3328
alexgourko@bntu.by

Tatyana A. Sakhnovich — Cand. Sci. (Econ.), Head of the Department of Engineering Economics, Department of Mechanical Engineering, Belarusian National Technical University, Minsk, Republic of Belarus
http:/orcid.org/0000-0001-7774-9843
Sahnovich@bntu.by

Svetlana V. Yudina — Dr. Sci. (Econ.), Prof. of the Department of E&UR, Kazan National Technical University named after. A.N. Tupolev, Kazan, Russia
http:/orcid.org/0000-0001-7774-9843
Corresponding author:
SVYudina@kai.ru

Author's declared contribution:
A.V. Gulay — development of the major concept of the article.
A.I. Gourko — collection and analysis of data, processing of research results.
T.A. Sakhnovich — processing and interpretation of research results.
S.V. Yudina — development of the research methodology.

Conflicts of Interest Statement: The authors have no conflicts of interest to declare.

The article was received on 11.12.2023; revised on 28.12.2023
and accepted for publication on 15.01.2024.
The authors read and approved the final version of the manuscript.

ORIGINAL PAPER

DOI: 10.26794/2220-6469-2024-18-1-126-136
UDC 33.336.6(045)
JEL G32, O16

Factors of Sustainable Development in the Formation of the Value of Manufacturing Companies

Yu.Yu. Savchenko
Rubtsovsky Institute (branch) Altai State University, Rubtsovsk, Russia

ABSTRACT

The **relevance** of the research is justified by the need to search for new factors of business value formation, which are taken into account by stakeholders when making decisions. The **purpose** of the article is to analyze the influence of S- and G- factors on the value formation of Russian public companies in the manufacturing sector and to substantiate the importance of disclosing the indicators of sustainable development of companies as a factor of business growth. The study uses **methods** and tools of correlation, causal and comparative analysis. It was found that the position occupied in the RAEX ranking by S- and G- factors and the amount of capitalization are significantly correlated for companies in the extractive and manufacturing industries. There was found no statistically significant relationship between the considered indicators in relation to the companies of the agro-industrial complex. It is confirmed that the influence of sustainable development components on the formation of the companies' value is different depending on their industry affiliation. The necessity to take into account ESG factors in the methods of comparative and income approaches is substantiated. The directions of ESG factors accounting in the methods of comparative and income approaches are highlighted. The scientific novelty of the research is determined by the substantiation of the necessity of separate accounting of the sustainable development components in the formation and assessment of business value. The **practical significance** of the study is that the results obtained by the author can be used by investors, owners and practicing appraisers in making managerial decisions and assessing and determining business value.

Keywords: business value; sustainable development; value factors; manufacturing companies; capitalization; social factors; corporate governance factors

For citation: **Savchenko Yu.Yu. Factors of sustainable development in the formation of the value of manufacturing companies. *The World of New Economy*. 2024;18(1):126-136. DOI: 10.26794/2220-6469-2024-18-1-126-136**

INTRODUCTION

The European Securities and Markets Authority (ESMA) issued a statement in July 2023 recalling the need for disclosure of sustainability information as it is essential (material) for an investor to make an informed assessment, including of assets and liabilities, profits and losses, financial position, and prospects of the issuer.[1] The concept of double materiality was first proposed by the European Commission in the guidelines on non-financial reporting.[2] The concept implies the importance of disclosure of information for understanding, firstly, the development, performance and market position of the company affecting its value, and secondly, the impact of the company's activities on stakeholders.

The concept of double materiality is quite widely reflected in the theory. The issues of ESG principles implementation in corporate management are considered in the works of M.P. Afanasiev, N.N. Shash, S.B. Safronov, A.M. Margolin, I.V. Vyakina, R.P. Bulyga, M.V. Melnik, I.V. Safonova and V.B. Gisin [1–3].

Of considerable interest for the purposes of our study are the works devoted to the issues of ESG factors' impact and their disclosure on the financial performance of companies and their value. Most of the works show that the more attention a company pays to these issues, the better its financial performance panel. Thus, B.S. Bataeva, A.D. Kokurina and N.A. Karpov, having analysed the performance of 50 Russian public companies whose shares were traded on the Moscow Exchange, concluded that the ESG disclosure ratio is positively and statistically significantly related to profitability, while the profitability of companies is influenced by the overall ESG disclosure ratio and its environmental component [4].

The results of the study by C.J. Thomas, J. Tuyon, H. Matahir, S. Dixit of Malaysian companies allowed the authors to conclude about the positive impact of ESG-policy on profitability performance profile of shareholders' equity (ROE) [5]. At the same time, the analysis of disaggregated indicators of sustainable development showed that the social component (S) has a significant impact on return on equity and Tobin's coefficient (Tobin's Q), while the corporate governance component (G) — only on Tobin's Q coefficient.

J.B. Wong and Q. Zhang, as a result of an empirical study of US public companies from January 2007 to December 2018, concluded that their valuation is negatively affected by the disclosure of negative information about ESG factors [6].

Thus, the conducted review of scientific literature suggests that sustainable development of companies is a positive factor that contributes to business growth.

RESULTS OF THE RESEARCH

A company's sustainable development processes can be judged by its profile in ESG ratings. The use of the term "sustainable development" or "ESG" in corporate practice conceals a larger goal, namely the harmonious development of the company's business model. Sustainable development is a complex criterion that allows assessing the efficiency of interaction of all types of the company's capital, i.e. — an element of the convergent component of intellectual capital.

In the context of sanctions, the inclusion of domestic companies in international ESG ratings has lost its relevance. There is a sufficiently large number of national ESG-ratings in Russia (*Table 1*).

ESG principles are being actively implemented in Russia. Orientation on them will contribute to the transformation of companies' activities. The company's inclusion in the ESG agenda, considered in a number of works as a component of business reputation, is a manifestation and result of intellectual capital functioning. The company's position in the ESG-rating allows to form an idea of the quality of its business model. It is this indi-

[1] Public Statement Sustainability disclosure in prospectuses. URL: https://www.esma.europa.eu/sites/default/files/2023–07/ESMA32–1399193447–441_Statement_on_sustainability_disclosure_in_prospectuses.pdf (accessed on 11.02.2024).

[2] Guidelines on non-financial reporting: supplement on reporting climate related information. URL: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52019XC 0620(01)&from=EN (accessed on 11.02.2024).

Table 1

Russian ESG ratings

Rating	Rating compiler	Methodology
RSPP (Russian Union of Industrialists and Entrepreneurs) Sustainability ESG Indices	Russian Union of Industrialists and Entrepreneurs (RSPP) (since 2014)	Includes two interrelated indices. The Sustainability Vector Index reflects the dynamics of socio-economic and environmental performance indicators and a systematic approach to sustainable development (SD) management. The Responsibility and Openness Index reflects the general situation in the area of sustainable development (SD) disclosure in the public reporting of major Russian companies
Stock ESG indices of Moscow Stock Exchange based on RSPP (Russian Union of Industrialists and Entrepreneurs) ESG indices	Moscow Stock Exchange	These are formed taking into account the RSPP Sustainability Indices, and starting from 2020, the Moscow Stock Exchange compiles the UN SDGs Disclosure Rating.
ESG-rating of NCR	National Credit Ratings LLC	Proprietary (own) methodology based on Russian and foreign experience. It is intended for assigning ESG ratings to non-financial companies, financial and credit companies, regional and municipal authorities. ESG-rating includes three factors ("Environmental Component", "Social Component", "Governance Component"), then the weighted sum of the three factors' assessments is determined as follows
ESG rating of NRA	National Rating Agency LLC	Forms ESG ratings and rankings assessing the level of ESG risks in the activities of Russian constituent entities and companies, including industrial, consumer, financial, non-financial and real estate sectors. It is used to assess companies in the industrial sector with due regard to industry specifics in accordance with the Agency's methodological approaches to assigning ESG ratings. As a result, companies are categorised into groups according to the degree of integration of ESG factors into the companies' activities
ESG rating of Expert RA	Expert RA JSC	The methodology takes into account UN sustainable development standards, ICMA sustainable development bond principles, LMA green loan principles and VEB.RF methodological recommendations. It includes: ESG — environmental, social and corporate responsibility rating; CGQ — Corporate Governance Quality rating. The ESG rating is determined based on a weighted sum of the scores of the "Environment", "Society", and "Governance Quality" sections, as well as stress and support factors
ACRA ESG rating	Analytical Credit Rating Agency (JSC ACRA)	ACRA is on the list of independent verifiers of the International Capital Markets Association (ICMA). The final ESG rating is a weighted assessment of three blocks: "Environment", "Social Responsibility' and "Governance". Each block is assessed in three stages: evaluation of the company's performance; evaluation of actions to minimise risks and the ability to withstand them; evaluation of the level of compliance with best practices

Source: compiled by the author.

Table 2

ESG-assessment map based on the indicators "social factors" and "corporate governance" of the RAEX ESG rating methodology

Group of factors	Factor	Factor weight, %
S	Human capital	9.8
	Corporate social responsibility	12.3
	General social risks	7.4
	Social asset portfolio	7.4
G	Corporate structure	19.5
	Corporate behaviour	16.5

Source: compiled by the author.

cator that speaks about the harmonious development of the company, satisfaction of interests of all groups of stakeholders and which is achieved only if all components of intellectual capital are sufficiently formed. In addition, the company's adherence to the ESG-concept is an additional tool to counteract negative factors of the external environment and reduce risks.

The topic of ESG agenda can set a positive impetus for the development of Russian companies when realising its value in terms of cost and investment attractiveness.

One of the most popular in Russia is the RAEX ESG ranking of Russian companies, which includes an assessment of components in the following dimensions: environment (E), social sphere (S) and corporate governance (G). The RAEX ESG ranking as of October 2023 includes 160 organisations.

The data sample for the correlation analysis is not balanced, as the number of public companies from the manufacturing sector was different in the rating in different years. Data for 2022 was not considered due to the decision of a number of organisations not to publish non-financial reports during the period of volatility of external factors and the impact of sanctions on the capitalisation indicator.

The ESG scorecard for "social factors" and "corporate governance" is presented in *Table 2*.

The sample includes Russian public companies in the manufacturing sector whose shares are traded on the Moscow Stock Exchange. The changes in their positions in the RAEX ranking by G-factor are presented in *Table 3*.

Many domestic companies have an unstable position in the rating. This is primarily due to the completeness of information disclosure on their part. The biggest drop in the rating during the analysed period was observed at Mechel PJSC, which moved from the top leaders to the second echelon, losing 87 positions at once. MMK (Magnitogorsk Iron and Steel Works) PJSC and TMK (Pipe Metallurgical Company) PJSC are quite stable.

The positions of the analysed companies in the RAEX ranking by S-factor are presented in *Table 4*.

The positions of the companies under study in the RAEX ranking by S-factor are more stable, i.e., their policy of information disclosure in this area is characterised by greater transparency.

Thus, the descriptive analysis showed that the number of companies represented in the ranking increased over the period under review. Since 2021, all of them have been included in the RAEX ranking. The positions they occupy in terms of S- and G-factors may differ quite significantly in one time period.

Table 3

Changing in the position of public companies in the manufacturing sector of companies in the RAEX ranking by G-factor

No.	Company/year	G- factor				
		2018	2019	2020	2021	2022
1	PJSC Norilsk Nickel	17	4	27	44	4
2	PJSC Severstal	10	11	11	17	22
3	PJSC NLMK	6	5	18	11	23
4	PJSC Rusagro	-	-	-	70	79
5	PJSC Acron	-	-	-	66	53
6	PJSC En+	-	-	-	42	32
7	PJSC United Aircraft Company	-	-	-	116	128
8	United Company RUSAL (Rusal)	8	3	29	53	42
9	PJSC Magnitogorsk Iron and Steel Works (MMK)	5	9	12	19	11
10	PJSC Polymetal	-	-	15	24	14
11	PJSC Pipe Metallurgical Company (TMK)	-	-	32	30	28
12	PJSC Asha Metallurgical Plant	-	-	-	102	101
13	PJSC Mechel	2	6	42	98	89
14	PJSC Nizhnekamskneftekhim	-	-	-	87	95
15	PJSC Kazanorgsintez	-	-	-	119	117
16	PJSC Rusagro	-	-	-	70	79
17	PJSC KuibyshevAzot	-	-	-	112	111
18	PJSC Kamaz	-	-	-	50	67
19	PJSC Unipro	-	-	-	13	7

Source: compiled by the author.

Table 4

Changing in the position of public companies in the manufacturing sector of companies in the RAEX S-factor ranking

No.	Company/year	S- factor				
		2018	2019	2020	2021	2022
1	PJSC Norilsk Nickel	8	4	16	11	15
2	PJSC Alrosa	-	-	-	13	27
3	PJSC Severstal	24	22	4	2	8
4	PJSC NLMK	21	18	3	12	2
5	PJSC Rusagro	-	-	-	52	64
6	PJSC Acron	-	-	-	48	54
7	PJSC En+	-	-	-	21	20
8	PJSC United Aircraft Company	-	-	-	86	128
9	United Company RUSAL (Rusal)	7	24	24	30	25
10	PJSC Magnitogorsk Iron and Steel Works (MMK)	3	12	30	18	20
11	PJSC Polymetal	-	-	2	4	4
12	PJSC Pipe Metallurgical Company (TMK)	-	-	34	54	58
13	PJSC Asha Metallurgical Plant	-	-	-	108	117
14	PJSC Mechel	29	28	52	150	134
15	PJSC Nizhnekamskneftekhim	-	-	-	119	122
16	PJSC Kazanorgsintez	-	-	-	139	142
17	PJSC Rusagro	-	-	-	52	79
18	PJSC KuibyshevAzot	-	-	-	53	73
19	PJSC Kamaz	-	-	-	43	45
20	PJSC Unipro	-	-	-	38	41

Source: compiled by the author.

THE ROLE OF S- AND G-FACTORS IN THE FORMATION OF THE VALUE OF MANUFACTURING COMPANIES

In today's economy, non-financial value drivers are becoming increasingly important. One of them is a company's inclusion in the sustainable development agenda, which an investor can assess through its position in ESG ratings. At the same time, the fact that a company is included in the sustainable development agenda is a manifestation of its intellectual capital. Thus, one of the studies suggests distinguishing three groups of capitalised components of intellectual capital: competence, digital and convergent ones [9]. One of the indicators characterising the state of the convergent component of intellectual capital can be the position in the sustainable development ratings (rankings). To understand the role of the factor of the company's inclusion in the sustainable development agenda in the formation of business value, we will analyse the relationship between its position in the RAEX ESG ranking and the capitalisation indicator. Company value and capitalisation indicator are not identical concepts [10]. The market capitalisation of a company is the total value of shares currently circulating on the stock market. The scientific literature has not formed a unified view on the understanding of capitalisation. G.I. Khotinskaya's research identifies several types of capitalisation: real, marketing and the type that is understood as the market value of the company whose shares are listed on the stock exchange [11]. Capitalisation is influenced by a large number of macroeconomic, industry and internal factors, including political and psychological factors. Many of these factors are beyond the control of management. Capitalisation at a particular date may not reflect the market value of the company, which can vary depending on the indicators used by the analyst. Nevertheless, capitalisation trends are correlated with the value of the company. There are studies demonstrating that there is a significant relationship between capitalisation and business value (cost) in most cases [11]. Capitalisation is a comprehensive characteristic of a company's ability to create value. In the study we will adhere to this understanding of the term.

Since investors are increasingly demanding information on the impact of non-financial indicators on the formation of company value, it is necessary to understand the direction and strength of the relationship between inclusion in the sustainable development agenda and capitalisation. As an indicator characterising the factor of inclusion in the sustainable development agenda, let us consider the position taken by the company in the RAEX ranking.

The impact of the E-factor (environmental) has not been analysed, as it is subject to a significant number of requirements and regulations, which would require a separate study and consideration of the relevant specifics.

The following hypotheses were put forward as part of the analysis:

1. The company's position in the RAEX ranking decomposed by S- and G-factors affects the dynamics of capitalisation of manufacturing companies.

2. For a potential investor S- and G-factors in the RAEX ranking have different significance and, accordingly, the degree of influence on capitalisation.

3. The strength of influence of S- and G-factors on the market capitalisation of manufacturing companies depends on their industry affiliation.

Let us assess the impact of the positions of the companies under study by S- and G-factors in the RAEX ESG ranking on their capitalisation (see *Figure*).

From the obtained results we can conclude that the relationship between the capitalisation indicator and the S-factor position of Russian industrial companies is moderate ($r = 0.48$), and the correlation coefficient is < 0.5 (*Table 5*). The correlation between the R-factor position and capitalisation is significant and ranges from 0.5 to 0.7 ($r = 0.61$). Thus, the R-factor position has a stronger impact on capitalisation than the S-factor position.

Table 5

Correlation coefficients between the capitalization of companies and factors from the convergent component of intellectual capital

Aggregated industry	Factor	
	G-factor position	S-factor position
Agro-industrial complex	-	-
Extractive industries	-	-
Manufacturing industries	-	-

Source: calculated by the author.

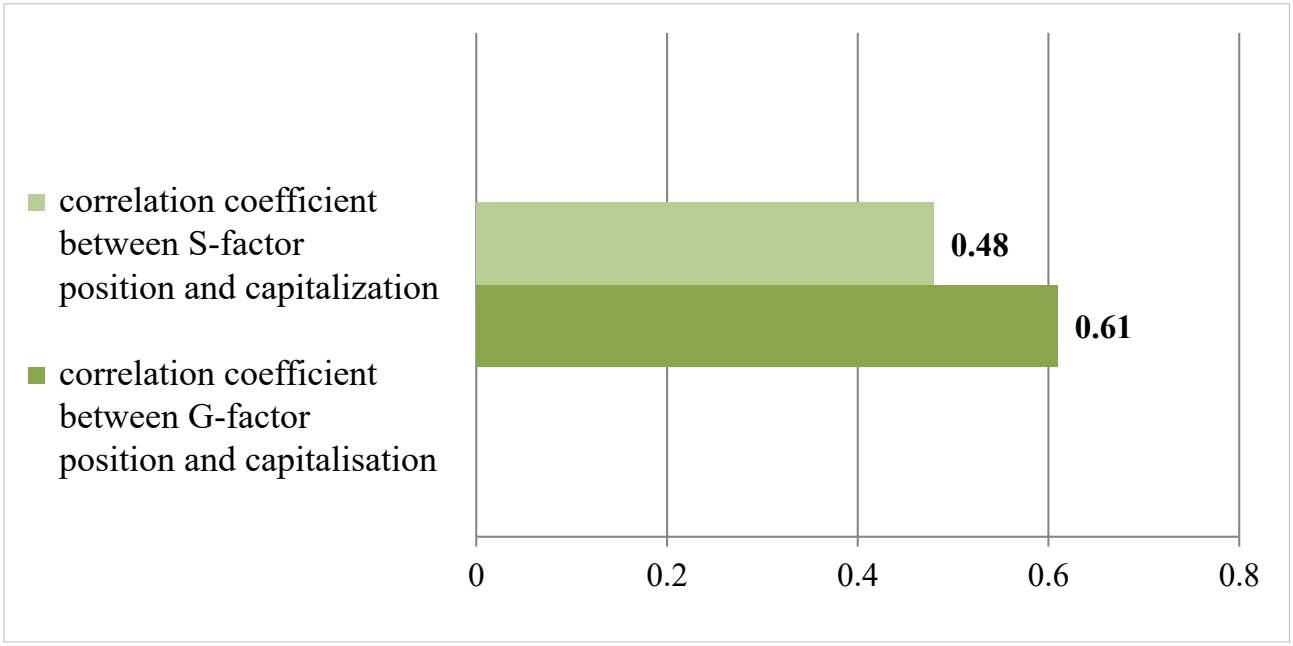

Fig. **The results of the correlation analysis of the relationship between the position on S- and G-factors and the capitalization of public manufacturing companies**

Source: calculated by the author.

Further, the studied companies were distributed into three aggregated industries: extractive, manufacturing, and agro-industrial complex.

When considering the differences in the influence of S- and G-factors on the capitalisation of public manufacturing companies depending on the industry affiliation, the following was revealed:

- the most sensitive to the studied factors is the value of capitalisation of companies in the extractive and manufacturing industries. A moderate correlation was found between capitalisation and the position of companies in the ranking by S- and G-factors;
- no statistically significant correlation was found between capitalisation and the position in the RAEX ranking by S- and G-factors for companies belonging to the agro-industrial complex. Accordingly, these indicators cannot be

considered as having a positive impact on the market capitalisation of companies.

The results of the analysis of the entire set of public manufacturing companies under study allowed us to conclude that the company's position in the RAEX rating by S- and G-factors influences market capitalisation, i.e., hypothesis 1 is confirmed.

Hypothesis 2 is partially confirmed. The relationship between the G-factor and the capitalisation of companies is significant (R = 0.61). The influence of S-factor on capitalisation of manufacturing companies is moderate (R = 0.48) (see *Figure*). Accordingly, on the basis of the studied sample of companies, the considered factors indicate insignificant difference in the degree of influence on capitalisation with the same vector of orientation.

Hypothesis 3 was confirmed on the basis of correlation analysis of the impact of the company's position in the RAEX ranking by the group of S- and G-factors, taking into account the industry.

For Russian companies of the agro-industrial sector, S- and G-factors from the position of influence on capitalisation turned out to be insignificant, the correlation coefficients, respectively, were –0,22 and –0,39. The strongest correlation is observed between S- and G-factors and the capitalisation of companies in the extractive and manufacturing sectors. Thus, it is confirmed that the strength of the influence of the above factors on the market capitalisation of manufacturing companies is different depending on their industry affiliation.

CONSIDERATION OF S- AND G-FACTORS IN THE FORMATION AND ASSESSMENT OF BUSINESS VALUE

Traditional approaches to assessing the value of a company are focused on financial factors, but changes in the economy have led to the emergence of new — non-financial — value formation drivers. ESG indicators are taken into account by investors when making decisions, including when buying or selling a business. Market value is the value that an interested party considers "adequate" on the basis of evaluation or available information. Information on the implementation of the company's sustainable development strategy provides insight into its current and forecasted state. The appraiser's professional judgement of the business value at the current date should be formed taking into account the ESG-indicators in specific industries.

The influence of ESG factors on the formation of business value is considered either from the position of reducing the risks of activity or taking into account the optimisation of the company's business model, which is expressed both in the results of current activity and future profitability.

The results of the conducted research allow us to state that it is reasonable to separate the directions of ESG-factors accounting within the framework of business valuation in case of significant difference of influence on the processes of its value formation in the industry. ESG factors can be taken into account in the methods of income and comparative approaches.

The directions of ESG-factors accounting in the comparative approach to business valuation include:

- market research of the industry, including analysis of the impact of ESG factors on the capitalisation and performance of companies; preparation of a profile of the impact of ESG factors in relation to the industry; substantiation of the significance of ESG factors affecting the valuation of the company;
- analysis of financial and non-financial statements of companies, ESG ratings and rankings; selection of peer companies; comparison of peers and the valuation object according to specified parameters;
- selection of traditional multiples used to calculate the value of the object with further adjustments for ESG factors, or development and introduction of a new multiplier allowing to take into account the influence of non-financial value factors, including those related to the group under consideration.

Within the framework of income approach methods two directions of ESG-factors accounting can be distinguished:

- identification and inclusion of specific risks for each component of ESG factors in the discount rate calculation;
- calculation of the value of future cash flows: justification of the forecast period taking into account ESG factors, assessment of the impact on cash flows, calculation of the discount rate and long-term sustainable growth rate.

At the same time, it is advisable to model the impact of ESG factors on the company's financial performance, in particular, on cash flows.

CONCLUSIONS

Thus, the issue of expanding the range of non-financial factors taken into account in the business valuation process and introducing them into the methods of traditional approaches should be resolved. The results of the research have demonstrated that the significance of ESG factors and their impact on the capitalisation indicator of companies have a clearly expressed specificity, which allows us to argue that it is necessary to take them into account separately in the process of business value formation. Russian companies have not fully comprehended the need to follow the sustainable development agenda and disclose relevant information. A constraining factor is the insufficient penetration of ESG criteria in the practice of business value assessment. Today, work in this area is limited only by an increasing number of theoretical studies, while in practice the relevant mechanisms and tools have not been developed.

The influence of ESG factors on the value of Russian manufacturing companies will increase as the number of those participating in the ratings increases, as investors pay more attention to them and as these factors are introduced into business valuation practice. The identification of cause-and-effect relationships between ESG indicators and the value of companies requires further research and development of business valuation methodology.

The results of the study confirmed the relationship of S- and G-factors with the **market capitalisation indicator** of companies in the extractive and manufacturing industries. The R-factor position was found to have a stronger impact on capitalisation than the S-factor, but this result may be determined by the time lag of the study and the characteristics of the sample. Analysing the separate influence of S- and G-factors on the performance of companies requires further research that takes into account industry differences.

REFERENCES

1. Afanas'ev M.P., Shash N.N. ESG-transformation in the corporate sector: Systematizing the global approach. *Studies on Russian Economic Development*. 2022;33(6):707–715. DOI: 10.1134/s1075700722060028 (In Russ.: *Problemy prognozirovaniya.* 2022;(6):185–197. DOI: 10.47711/0868–6351–195–185–197).
2. Safronov S.B. ESG factors — risks and opportunities. *Sovremennye tekhnologii upravleniya = Modern Management Technology*. 2022;(1):9. (In Russ.).
3. Bulyga R.P., Melnik M.V., Safonova I.V., Gisin V.B. A model of ESG-transparency index in corporate reporting. *Vestnik MGIMO-Universiteta = MGIMO Review of International Relations*. 2023;16(3):56–80. (In Russ.). DOI: 10.24833/2071–8160–2023–3–90–56–80
4. Margolin A.M., Vyakina I.V. Risks, threats and mechanisms of management systems of ESG-transformation. *MIR (Modernizatsiya. Innovatsii. Razvitie) = MIR (Modernization. Innovation. Research).* 2022;13(3):352–368. (In Russ.). DOI: 10.18184/2079–4665.2022.13.3.352–368
5. Bataeva B.S., Kokurina A.D., Karpov N.A. The impact of ESG reporting on the financial performance of Russian public companies. *Upravlenets = The Manager*. 2021;12(6):20–32. (In Russ.). DOI: 10.29141/2218–5003–2021–12–6–2

6. Thomas C.J., Tuyon J., Matahir H., Dixit S. The impact of sustainability practices on firm financial performance: Evidence from Malaysia. *Management and Accounting Review*. 2021;20(2):211–243. DOI: 10.24191/MAR.V20i03–09
7. Wong J.B., Zhang Q. Stock market reactions to adverse ESG disclosure via media channels. *The British Accounting Review*. 2022;54(1):101045. DOI: 10.1016/j.bar.2021.101045
8. Qureshi M.A., Kirkerud S., Tran K.T., Ahsan T. The impact of sustainability (environmental, social, and governance) disclosure and board diversity on firm value: The moderating role of industry sensitivity. *Business Strategy and the Environment*. 2020;29(3):1199–1214. DOI: 10.1002/bse.2427
9. Belik I.S., Dutsinin A.S., Nikulina N.L. Financial state and investment attractiveness of Russian public companies: The effect of ESG factors. *Upravlenets = The Manager*. 2022;13(6):44–55. (In Russ.). DOI: 10.29141/2218–5003–2022–13–6–4
10. Savchenko Yu. Yu. Overview of the changing role and structure of intellectual capital amidst digital transformation. *Kreativnaya ekonomika = Journal of Creative Economy*. 2022;16(12):4935–4952. (In Russ.). DOI: 10.18334/ce.16.12.116772
11. Kosorukova I.V., Prokimnov N.N. Analysis of level of capitalization and business cost on different phases of macroeconomic cycle. *Finansovaya analitika: problemy i resheniya = Financial Analytics: Science and Experience*. 2014;(18):50–56. (In Russ.).
12. Khotinskaya G.I., Gal'tseva E.V. The theory and practice of capitalization in market conditions. *Sobstvennost' i rynok*. 2005;(9):2–5. (In Russ.).

ABOUT THE AUTHOR

Yuliya Yu. Savchenko — Assistant Prof., Department of GMU and Law, Rubtsovsk Institute (branch), Barnaul, Russia
https://orcid.org/0000-0002-5121-5680
savtenko@rb.asu.ru

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was received on 20.02.2024; revised on 10.03.2024 and accepted for publication on 20.03.2024. The author read and approved the final version of the manuscript.