CONTEMPORARY WORLD ECONOMY

JOURNAL OF HSE UNIVERSITY'S SCHOOL OF WORLD ECONOMY

PUBLISHED SINCE 2023 ISSUED QUARTERLY

VOL. 1. No 2 (2) 2023

Founder and Publisher HSE University

Founder and Publisher's address 11 Pokrovsky Bulvar,
Moscow 109028, Russia
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Moscow 119017, Russia

Website cwejournal.hse.ru

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ECONOMIC GROWTH AND THE CYCLE

UNEQUAL DEVELOPMENT OF COUNTRIES AND REGIONS

The expansion of migration processes, as a rule, leads to an increase in the volume of remittances, both those sent by migrants to their family's homeland (to the migrants' donor country) and those received by the migrants themselves in the recipient country. This study examines the patterns of migration processes between the two countries (the migrants' donor country and the recipient country) and finds the three stages of migration cycle. The findings show that remittances depend on the stages of migration non-linearly. During the first stage, when migrants decide to migrate and start to leave the donor country for the recipient country, the volume of remittances sent by migrants to their homeland increases, and so does the volume of remittances in the opposite direction. During the second stage, when the recipient country becomes a key destination and the migrant diaspora expands significantly, the remittances sent by the migrants increase, while the received ones decrease or stagnate. During the third stage, when a degree of migrants' naturalization is high, the volume of remittances sent back decreases (due to the relocation of migrant families), while the received ones, on the contrary, start growing amid the sale of assets in their homeland. Using data from the World Bank, the UN and central (national) banks, the research determines quantitative conditions for the transition from one stage to another based on the concentration of migration flows from the donor country and the share of migrants from specific donor country to the total number of migrants living in the recipient country. Additional findings show that in some cases, when migrants do not intend to live permanently in the recipient country, the volumes of the sent remittances continue to grow even amid very high concentration of migration flows.

The problem of unequal income distribution is relevant. This article is devoted to the analysis and assessment of the level of capital concentration in the world and, as a consequence, the uneven distribution of income in the global economy, particularly in Armenia. This study shows the unevenness of capital accumulation by volume and per capita in the leading countries of the world and in post-Soviet countries. The capital accumulated in some countries makes it possible to change economic systems and ensure development on a scale that has not been seen before. Simultaneously, the unevenness of accumulation increases the gap between countries with capital and those that lack capital. Globalization exacerbates the problem of capital concentration. The concentration of capital through the creation of a global market has provided new opportunities for lagging countries to become a fully fledged part of the world's economic processes. However, in reality, the process is reversed, and the benefits of globalization accrue mainly to large owners of capital. Many countries remain outside the process of development of the global economy, and acute inequality in income distribution both within individual states and in the global arena remains an unsolved problem. The study examined in detail the theoretical background of the increasing concentration of capital in the world, highlighting the positive and negative factors of its impact on economic growth. This study also considers an example of the Armenian economy. The study concluded that capital concentration leads to unequal distribution of income globally but is also a key driver of economic growth in many countries.

INTERNATIONAL INTEGRATION

The article analyses the stages of development of the Organization of Turkic States (OTS) as an international organization. The active consolidation measures taken by Turkey to establish economic relations with the independent states of Central Asia are examined, and the main directions of development of the international economic relations of the OTS states are studied. On the basis of the collected and analyzed data, it is concluded that the interest of the OTS countries in expanding their spheres of influence is evident at the present time. The current state of international economic relations of the new Eurasian regional integration associations, the OTS and the Eurasian Economic Union (EAEU), which emerged after the destruction of the common economic space of the USSR, is examined. The article reveals promising directions of economic development of the OTS, which allow us to consider it as a specific risk factor for the EAEU.

PRESENT AND FUTURE OF THE RUSSIAN ECONOMY

The financial, economic and trade break between the Russian Federation and the West should stimulate national business activity in Latin America in line with the general foreign economic turn to the Global South. The task of intensifying relations with Latin America (or Latin-Caribbean America, LCA) is on the agenda, but the unprecedented sharpness of the conflict between Russia and the West has had heterogeneous consequences, in some cases narrowing the corridor of opportunities for increasing economic exchanges between Russia and LCA states. The essence of the problem is that the systemic trade and financial restrictions imposed by the West have led to the imbalance of the international raw materials and food markets, disrupted logistics chains and, in some areas, put Russia and Latin American countries in a difficult trade and economic situation. However, in the author's opinion, even in this crisis situation there is room not only for maintaining the achieved level of Russian-Latin American cooperation, but also for building mutually beneficial trade and economic relations in new technological sectors.

REVIEWS

The Intangible Drivers of Financial Crises. Part 2

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For citation: Gurvich, Evsey, 2023. The Intangible Drivers of Financial Crises, *Contemporary World Economy*, Vol. 1, No 2.

DOI: https://doi.org/10.17323/2949-5776-2023-1-2-6-27

Keywords: financial crisis, self-fulfilling predictions, uncertainty indicators, crisis contagion, Russian anti-crisis policy.

Abstract

The second part of the study examines the interaction of fundamental and intangible sources of financial crises at different stages of their development: their origin, spread within the economy and between countries, and the adoption of anti-crisis measures. The oil price situation is cited as one of the mechanisms considered: rising economic policy uncertainty increases oil price uncertainty, which in turn has a negative impact on the GDP of oil-producing countries such as Mexico or Russia.

The general results are used to analyze the mechanisms of the major financial crises of the last decades, including the Russian crises, as well as the Great Depression. In all cases, the crisis was the result of the interaction between fundamental and intangible factors, and sometimes supplemented by political factors.

Finally, we discuss the macroeconomic policies of the Russian government and the Central Bank during the financial crises of 1998, 2008–2009, and 2014–2015, as well as the changes in these policies following each of the crises. Challenges ahead of potential new crises are listed as well as problems that require an early response, such as the sharp rise in geopolitical tensions from the beginning of 2022

The study begins in the previous issue of the Contemporary World Economy Journal.

The Role of Intangible Factors in the Mechanisms of Financial Crises

To summarize the theoretical and empirical work on crisis analysis, we can distinguish three main components of crisis emergence and evolution: a) the source of the crisis, b) its spread (first within a single economy, then by "contagion" to other countries), and c) government and central bank responses (which may have positive results in the short term but negative consequences in the medium and long term).

Some key crisis mechanisms are common to several (or all) types of crisis, while others are specific to certain types of crises. With this in mind, we will consider the main crisis mechanisms and pathways within each stage, noting the categories of crises for which they are characteristic.

Sources of the Crisis

The primary trigger of a crisis may be an internal or external shock, for example, a sharp deterioration in trade conditions (for Russia, a fall in oil prices), the "burst of a bubble" (in the housing market or any other market), etc. This example illustrates the interplay between the roles of fundamental and intangible factors. On the one hand, an important consequence of negative shocks is an increase in macroeconomic imbalances: current account and/or budget deficits, which create the conditions for a subsequent crisis (see Allen et al. 2002). On the other hand, investors' forecasts and expectations deteriorate, increasing the risk of a self-fulfilling currency or debt crisis. Another important source of crises, the formation of credit booms or financial bubbles, can also be largely driven by intangible factors, as shown above.

Observations of the emergence of new crises and in-depth analyses of past crises have led to the development of a number of dynamic modifications of classical models that bring us closer to understanding the real mechanisms of financial crises. A relatively simple evolution is proposed by Gumus (2016). While standard first-generation models predict an inevitable speculative attack on the currency in the case of monetary financing of chronic fiscal deficits, this study considers a situation in which deficits occur only with a certain probability in the long run. It is shown that the mere possibility of a future deficit, even if it does not actually occur, is a sufficient basis for a speculative attack.

Furthermore, we can mention the "slow debt crisis" model proposed by Lorenzoni, Werning (2019), which is a dynamic version of the Calvo (1988) model. In this model, the government borrows funds necessary to cover the budget deficit at each step. As in the static case, there are several self-fulfilling equilibria; in particular, the expectation of default leads to an increase in interest rates, which accelerates the process of public debt accumulation and eventually triggers default. Corsetti, Maeng (2023) show that the two sources of self-fulfilling debt crises ("strategic default" as in the Calvo model and "liquidity crises" as in Cole, Kehoe) are closely related and may in fact represent different phases of the crisis evolution. At an average level of accumulated debt, its value gradually increases in a "slow crisis" mechanism, and then, when the debt exceeds the threshold acceptable to investors, the government loses the ability to refinance its obligations on

the capital market and, even if it remains solvent, is forced to declare default (i.e. "fast" liquidity crisis occurs).

Another dynamic model of a self-fulfilling debt crisis is proposed in Ayres et al. (2018). It describes the process of bond yield formation as a result of the interaction between the borrower government and private investors. It is shown that the equilibrium yield depends on both a fundamental factor, the government's debt burden, and investors' expectations. Their negative expectations become self-fulfilling, but the probability of pessimistic expectations increases when government debt is high. This leads to a multiplicity of equilibrium yield levels in the debt market. This model provides explanations for several paradoxical crisis situations. One relates to the period of the Argentinean debt crisis in 1998–2002, before which the public debt was not high by international standards (around 40% of GDP), but the spread of the government's dollar bonds over U.S. bonds reached 7 percentage points (p.p.). The second paradox occurred in Italy, Spain, and some other Eurozone countries in 2009–2012, when bond spreads in these countries rose sharply from close to zero to 5 p.p. The model allows for endogenous changes in investors' expectations, which provides a good explanation for the sharp fluctuations in euro area bond yields observed after the "Great Recession."

An important source of self-fulfilling crises is presented in a paper by Tamborini (2015), which also purports to describe the mechanism of the debt crisis in Western European countries in 2009–2012. In this model, the source is the lack of reliable assessments of of these countries' prospects, which leads investors to develop their own divergent perceptions of the size of the primary surplus that guarantees the solvency of the countries in question. It is shown that if a sufficiently large proportion of investors believe that a country is insolvent, the government will eventually be forced to default, even if the country is actually solvent. The paper by Stangebye (2020) also considers a self-fulfilling crisis caused by an "expectation shock." In this case, a deterioration in estimates and forecasts of the future state of the economy (for any reason) leads to an increase in the cost of borrowing, and the rational response of the sovereign is to increase borrowing and the probability of default. In summary, given the same fundamentals, more pessimistic expectations increase the probability of crisis.

Another plausible debt crisis scenario is described by Conesa, Kehoe (2017). Their model considers a state that, after experiencing a fall in budget revenues, decides between cutting spending (raising taxes) and increasing borrowing. The first option is painful for the economy but preserves the availability of the debt market, while the second option provides an opportunity to support public and private consumption and does not aggravate the economic downturn by raising taxes but requires finding additional sources of financing. Under certain conditions (e.g., if the government believes that revenues will soon recover), the latter consideration is stronger than the former, and the rational solution is to build up debt in the expectation that it will be repaid when "better times" come. If investors believe that "better times" will come, then there is no crisis, but if they do not believe that this will happen, then the government will have to default when its reserves are exhausted. Thus, in this "game of ruin" model, the source of the self-fulfilling crisis is uncertainty about the country's future budget revenues.

Crisis Proliferation

In addition to the well-known transmission mechanisms of financial shocks from one country to another (trade, financial, etc.), the contagion of uncertainty shocks also plays an important role in the spread of crises. The analysis suggests that economic uncertainty shocks are transmitted across countries and adversely affect output in the "infected" country. This type of contagion occurs through several channels (trade, financial, information, etc.), with trade being the most important contributor. An important common mechanism is related to financial globalization; for example, increased uncertainty in the U.S. leads to lower credit leverage in partner countries (especially in emerging markets). As a result, the risk premium rises in most countries and asset prices and output fall (Akinci, Kalemli-Özcan, Queralto 2022; Bhattarai, Chatterjee, Park, 2020). The negative impact of uncertainty in the largest economies on other countries is statistically significant and quite substantial. For example, according to Moramarco (2022), the international diffusion of uncertainty about economic conditions almost doubles the level of ambiguity: on average, "imported" uncertainty accounts for about 40% of the level of domestic uncertainty. Londono, Ma, and Wilson (2021) estimate that fluctuations in the uncertainty indicator studied in this paper determine about 28% of the subsequent variation in industrial production (with a particularly large impact on tradable output).

The impact of the "contagion" of uncertainty on economic conditions depends largely on the links between the source of uncertainty and the recipient country and their proximity (territorial, in terms of economic composition). However, when it comes to economic policy uncertainty, the strongest impact is felt between the major economic and financial centers: the U.S., Europe, and China. Thus, according to IMF experts, on average 2/3 of the impact of the EPU on output, investment and private consumption is explained by changes in the level of uncertainty in these three economies (See: Biljanovska, N., Grigoli, F., Hengge, M., 2021. Fear thy neighbor: Spillovers from economic policy uncertainty. *Review of International Economics*, Vol. 29, Issue 2).

Anti-crisis Measures

In times of an acute crisis, the most significant measures always involve monetary and fiscal easing. For example, to finance anti-crisis spending during the pandemic, developed countries increased their public debt by 19 percentage points of GDP in just one year, adding a total of $24 trillion in debt across all nations. This raises several interrelated questions: 1. Is a macroeconomic stimulus effective? 2. Within what limits can fiscal spending and monetary policy be increased and loosened without risking renewed destabilization (in effect, a second-order crisis)?

There is no doubt that anti-crisis programs have significantly mitigated the recent major crises (2008–2009 and 2020). In both cases, however, this was achieved at the cost of creating deferred problems, such as runaway inflation, dangerously rising budget deficits, and public debt in many countries. It is therefore important to assess whether the same objectives could have been achieved with smaller anti-crisis measures. From

this perspective, intangible factors play a crucial role. In particular, the answers to the two questions posed above largely depend on the level of confidence in the authorities' fiscal and monetary policies. The confidence that the government and the central bank will not deviate from the announced rules and objectives significantly mitigates the negative consequences of anti-crisis programs. For example, if economic agents trust the central bank, a temporary easing of monetary policy will not lead to an immediate spike in inflation. In terms of fiscal policy, confidence can be seen as the equivalent of "fiscal space," i.e. a safety margin represented by a low deficit and public debt and/or accumulated funds in the reserve fund.

An equally important point is that the increased level of uncertainty (which is always present in a crisis) greatly reduces the impact of almost all economic policy measures. Bloom (2009) notes that uncertainty makes the economy insensitive to most macroeconomic influences because there are reasons to refrain from taking immediate action in such a situation. As a result, economic activity is substantially less responsive to monetary stimulus, and investment growth in response to monetary shocks is two to five times lower when uncertainty is in the top decile than when uncertainty is in the bottom decile (Aastveit, Natvik, and Sola 2017). The work of Castelnuovo, Pellegrino (2018) also supports these findings. Jerow, Wolff (2022) show a significant (econometrically and economically) decline in size of the fiscal multipliers that characterize the impact of government spending on GDP during periods of high uncertainty.

Belke and Goemans (2022) reach an even more surprising result. After constructing a non-linear generalized impulse response function using quarterly U.S. data from 1960 to 2017, they find paradoxical results: under conditions of high uncertainty, the stimulative effect of government spending on output may not only diminish, but even reverse, with additional spending reducing output.

The Role of Intangible Factors in Specific Crises as Examples

Econometric Estimates of the Role of Crisis Mechanisms

A number of papers have attempted to identify the leading mechanisms of various crises using econometric analyses (Jeanne 1997, Tarashev 2004, etc.). Among other things, this research shows (Cuaresma, Slacik, 2008) that the dominant mechanisms of currency crises vary over time. In the 1980s, fundamental factors played a decisive role: (significant current account deficit, chronically high inflation, overvalued exchange rate, etc.). In the 1990s, on the other hand, the results suggest that self-fulfilling expectations mechanisms were more important, while the role of traditionally important factors, such as forced lending and budget deficits, was greatly reduced. Similar tests have also been introduced to analyze the individual crises discussed below.

This section examines this issue in the context of a number of specific crisis episodes.

The Great Depression

Although the events of the Great Depression (GD) in the U.S. have been extensively studied by many economists, there is still no consensus on its causes. The most common

assumption is that the main cause of the famous crisis was the excessively tight policy of the Federal Reserve during the early stages of the Great Depression. However, a number of authors (Greasley, Madsen 2006, Mathy 2020) believe that the mechanism was triggered by the successive action of several factors, including:

- Stock market boom.
- Misguided and inconsistent monetary policy.
- Sharp increase in uncertainty (as evidenced by soaring stock index volatility).

All of this triggered a collapse in fixed investment, which was observed at the beginning of the GD and ultimately became the main direct cause of the crisis. Much of this has been attributed to the economic uncertainty that emerged. Matty (2020) traces the impact of uncertainty (measured in four different ways) on the main indicators of economic activity: industrial production, employment, and hours worked. He concludes that about one-third of the output decline was due to stock market volatility shocks, and that the combined effect of all uncertainty shocks was as significant as the effect of monetary policy errors in terms of their impact on output. The impact of uncertainty on employment and hours worked was also significant.

The Mexican Financial Crisis of 1994

The Tequila crisis was notable in that it occurred against a background of apparent success in macroeconomic stabilization; between 1988 and 1993, inflation in Mexico fell from 159% to 8%, while the budget deficit was reduced. The reduction in inflation was largely due to the fixing of the peso-dollar exchange rate (the fixed exchange rate was later replaced by a currency corridor). The improved stability, together with the expected implementation of the North American Free Trade Area (NAFTA) Agreement from 1994, led to an active inflow of foreign currency into Mexico and an increase in gold and foreign exchange reserves.

However, in early 1994, severe political instability in the country led to a reversal of capital flows and a rapid decline in international reserves, which put severe pressure on the peso exchange rate in the face of a large current account deficit. On the other hand, spreads on quasi-currency (dollar-linked) government bonds and the differential between local and foreign currency bond yields remained stable almost until the devaluation, indicating that investor confidence in both the government's creditworthiness and the peso remained high. Nevertheless, on December 20, 1994, the government implemented a significant (15%) widening of the currency corridor and almost immediately announced a move to a floating exchange rate policy. As a result, the dollar exchange rate rose by almost 60% in the last two weeks of 1994 and by about 45% over the next year.

In analyzing the sequence of events that preceded the "Tequila crisis," a number of respected economists conclude that its main cause was a sharp decline in investor confidence in the government's willingness to defend the fixed exchange rate. While they agree that fundamentals played a limited role in the Tequila Crisis, they disagree on what exactly caused the change in investor sentiment and expectations. Masson, Agenor (1996) find that the "trigger" of the crisis was the widening of the exchange rate corridor, which may have been interpreted by investors as a sign that the recently elected president,

contrary to expectations, was not prioritizing the continuation of the previous exchange rate policy. Sachs, Tornell and Velasco (1996) suggest that the crisis was triggered by a sharp decline in gold and foreign exchange reserves, and support their position with the model of a self-fulfilling currency crisis. In this model, the government faces a choice at each stage between devaluation and maintaining the exchange rate. Devaluation implies inflation and partial depreciation of government debt but undermines investor confidence in the long run, while maintaining the exchange rate implies funds to repay the previous debt and finance the budget deficit. The sources of such funds may be bond issues, tax increases, or government borrowing by selling part of its foreign exchange reserves. Investors act independently, based on their expectations of future government decisions. Similar to other comparable models, under high (low) debt, there is a single equilibrium in which investors expect (do not expect) devaluation and it occurs (does not occur). In intermediate situations, expectations are uncorrelated with fundamentals, so there is a multiplicity of equilibria and the crisis becomes self-fulfilling. In this model, gold and foreign exchange reserves are essentially interchangeable with debt, so the authors believe that the fall in reserves has moved the economy from the "no devaluation" situation to the "devaluation is determined by investors' expectations" state.

It seems that the explanation of the "mystery of the Tequila crisis" (the sudden and abrupt change in investor sentiment from full confidence to panic flight from the peso) should unite both theories. A complete description of the underlying mechanism of the crisis must then include three links:

1. Sharp rise in political instability in early 1994 leads to large-scale capital outflows.

2. The rapid depletion of gold and foreign exchange reserves as a result of capital outflows shifts the situation in the market for sovereign foreign exchange debt from unambiguously stable to a zone of self-fulfilling expectations, but expectations themselves do not change.

3. The government's decision to widen the currency corridor acts as a negative signal that synchronises the change in investors' expectations. In general, the Mexican crisis of 1994 can be seen as an example of a "crisis of expectations."

The Asian Financial Crisis of 1997–1998

The crisis that began in mid-1997 was characterized by its complex nature (both monetary and banking), by the fact that it involved a large group of countries, by the combination of many mutually reinforcing elements in the mechanisms of its emergence and development, and by the seriousness and extent of its consequences. All this makes this event an excellent subject, almost a textbook, for the study of financial crises.

A. Background. The region entered 1997 with excellent economic performance. For example, the four countries soon to be hit hardest by the crisis (Indonesia, Malaysia, Thailand, and South Korea) had an average annual GDP growth of nearly 9% over the previous 10 years. At the same time, all countries in the region had balanced or even surplus budgets and were thus protected from the standard currency crises described by first-generation models.

However, as is often the case with prolonged dynamic growth, the region experienced a credit boom accompanied by bubbles in the stock and real estate

markets (as shown above, this is a typical precursor to a near-term financial crisis). Another important vulnerability was the large current account deficit, which was particularly high in Thailand (8% of the GDP in 1996). In sum, apparent successes were accompanied by serious macroeconomic vulnerabilities. Rapid and ill-prepared financial liberalization also played an important role, making Asian economies highly vulnerable to adverse shocks.

B. Currency crises. In 1997, all countries in the region experienced bankruptcy of large companies or the "deflation" of bubbles, especially in the property market. The weakest link was Thailand, where the baht fell victim to a speculative attack in the middle of the year. As a result, the dollar almost doubled against the baht by the end of the year, and the currency crisis spread to other countries in the region. In the second half of 1997, the dollar appreciated by 90% against the Korean won and the Indonesian rupiah, and by 54% against the Malaysian ringgit. The most likely mechanism for these massive depreciations seems to have been the following sequence: negative market signals, change in investor sentiment, and self-fulfilling currency crises (Radelet, Sachs 1998, Suh 2001). However, ad hoc tests (Miyao 2004) show that the crisis mechanism varied considerably across countries. In Thailand, which had the most severe macroeconomic weaknesses (mainly external deficits and overvalued real estate), fundamental problems played a leading role. In other countries in the region, where macroeconomic conditions were much better, the crisis was self-perpetuating, i.e. a change in investor sentiment was the main driver.

C. The spread of the crisis. In the immediate aftermath of the currency crisis in Thailand, investors began to withdraw capital from other countries in the region on the "analogy principle," which rapidly expanded the territory of the crisis. In addition, the crisis spread through the normal channels of financial and trade relations, involving not only immediate neighbors but also countries quite distant from East Asia. One consequence was a fall in oil prices as global growth forecasts deteriorated, which in turn triggered the Russian financial crisis of 1998.

The crisis then spread to the banking sector, leading to a sharp decline in credit to the real sector, with serious consequences for production. The fall in GDP in 1998 was particularly sharp in Indonesia (more than 13%), Thailand and Malaysia (around 7.5%), and South Korea (around 5%).

The multifaceted nature of the Asian crisis (both in terms of the sectors of the financial system affected and the variety of crisis mechanisms) shows that the prevention of financial crises requires the elimination of all potential sources and transmission mechanisms.

Russian financial crisis of 1998

A. Background. In 1995–1996 the transition from a centrally planned to a market economy was largely completed, while the first successes in macroeconomic stabilisation were achieved. By all indications, 1997 should have seen a turn towards a rapid recovery of economic activity. Indeed, after five years of deep recession, GDP began to grow (by 1.4% at the end of the year). The budget deficit was still very high (according to official statistics, it amounted to 4% of GDP for the federal budget in 1997, while according to

international standards it was even higher: 7.4% of GDP[1]), but an important achievement was that the debt was already being financed by market borrowing rather than by seigniorage. This, together with the stabilization of the rouble exchange rate, halved inflation (to 11%). As a result, investor optimism increased, as evidenced by the rapid decline in short-term government bond yields (from 35% in real terms at the end of 1996 to 8% in July-October 1997).

B. External shocks. The Asian financial crisis, which began in mid-1997, worsened investor sentiment toward emerging markets, as is usually the case. More importantly, oil prices have fallen sharply since the beginning of 1998 (by 36% year-on-year in January and then for the year as a whole). As a result, the value of hydrocarbon exports (which accounted for half of all merchandise exports) fell by a quarter, and the exchange rate of the rouble was severely dislocated from its fundamental level.

C. Government and Central Bank policies. The Central Bank was faced with the choice: to undertake a serious devaluation of the ruble or to protect it by any means necessary. Obviously, with limited gold and foreign exchange reserves, the effective exchange rate could only be maintained for a very short time without investor support. The right choice therefore depended crucially on how long the balance of payments crisis would last and, more importantly, on how long economic agents expected it to last. The central bank decided to act on the optimistic assumption that oil prices would recover soon (the officially announced position was that the terms of trade were expected to recover in 3-4 months at the latest). From January 1, 1998, the Central Bank adjusted and widened the limits of the currency corridor (as a result, the ceiling for the dollar exchange rate increased by 15%), but refused to undertake a more serious devaluation or to switch to a floating exchange rate. The problem was that the central bank's optimistic expectations were not shared by investors, who were convinced that oil prices would remain low for quite some time and so divested themselves of ruble-denominated assets. The growing pressure on the ruble was initially contained by the sale of gold and foreign exchange reserves, but the decline in these reserves could have further undermined confidence in the Russian currency, so the central bank soon switched to a policy of protecting the exchange rate by raising the cost of money. The refinancing rate was raised steadily, reaching (albeit briefly) the exorbitant level of 150% in May 1998 (compared to 21% in autumn 1997). The yield on short-term government bonds rose accordingly (to 55% in May 1998 and 81% in July 1998), and with it the real cost of servicing the public debt.

Meanwhile, the government tried to raise taxes to reduce the size of the deficit, but the Duma rejected the proposal. Thereafter, the main efforts were focused on replacing expensive short-term domestic borrowing with "cheap" long-term external borrowing and on obtaining IMF loans to restore investor confidence.

D. Mechanisms. In Russian economic history, the 1998 crisis was first and foremost a debt crisis ("default"). However, from the point of view of the mechanisms of its development, it seems more appropriate to consider two inextricably linked crises. The term "twin crisis" is widely used by economists to refer to a combination of banking and

[1] Grigoryev 1998.

currency crises.[2] Similarly, in the case of Russia in 1998, we can speak of a "double" (to distinguish it from "twin") crisis, combining currency and debt crises.

According to Gurvich and Andriakov (2006), despite a sharp rise in yields on ruble government bonds in the first half of 1998, interest rates on comparable foreign currency bonds rose only slightly: from 8–9% to 9–12%. At the same time, the share of non-residents in the short-term bond market, as well as the nominal value of short-term bonds/federal loan obligations (OFZ) in the portfolio of non-residents, increased throughout the crisis period. This suggests that, contrary to popular belief, investors were not afraid of a government default, but rather expected a significant depreciation of the ruble—quite natural in the conditions of a sharp drop in the country's export revenues. The high yields on ruble bonds reflected devaluation expectations (when bond yields were lower, they became unattractive relative to assets denominated in other currencies). At the same time, the government was unable to reduce its borrowing significantly because of the need to finance the budget deficit and to refinance large volumes (due to the predominance of short-term debt) of previously issued bonds. Until August 1998, the monthly repayments of short-term government bonds exceeded the total revenues of the federal budget.

Looking at the development of the Russian financial crisis through the prism of crisis models, it seems to be best described by the following two::

- "Slow crisis" (gradually increasing borrowing costs for the government, followed by interest costs, which increase the deficit, etc.)
- The "game of ruin" (the government hopes for a quick return to "normal" conditions, investors are more pessimistic). The Russian government hoped to survive the period of cheap oil, but did not have enough foreign currency reserves to do so. This situation illustrates how dangerous it is for the government to play such a game with investors without significant trump cards in the form of budget and currency reserves.

E. Mystery. One question that still has no clear answer is why the "default" occurred immediately after receiving over $6 billion in loans from the IMF and other international organizations in July and early August. Contrary to expectations, this support didn't just fail to alleviate the crisis, it actually brought it closer to a resolution, which came almost immediately after the loans were received. In other cases (e.g. after the European Central Bank announced its "direct monetary operations" program), the result was the opposite: investor confidence was restored and the crisis was averted.

Gurvich and Andriakov (2006) suggest that the IMF loan triggered a mechanism similar to a bank run: if depositors expect that a bank will soon be unable to pay out their deposits, they rush to withdraw their savings ahead of others before the bank runs out of liquidity. In all likelihood, the size of the loan, as assessed by investors, was insufficient to fully protect the ruble from devaluation.

To sum up, the financial crisis in Russia was caused by a combination of a number of fundamental economic weaknesses (a large budget deficit, high dependence on commodity exports, weaknesses in the banking system) and inflexible macroeconomic

[2] Known examples are the Tequila Crisis, the Asian Crisis of 1997, the Turkish Financial Crisis of 2000-2001, etc.

policies (for a variety of reasons): the central bank did not adjust the exchange rate to investors' expectations, the government had no way of reducing the budget deficit or borrowing on the short-term bond market. As a result, there was a serious divergence between the exchange rate expectations of investors and those of the government (based on different assumptions about the future dynamics of oil prices). In fact, the government's forecast was more accurate: a year after the "default," oil prices returned to the average level of 1997 and then rose many times over. This case shows that in the "game of ruin," proximity to investors' expectations and the availability of sufficient reserves are more important than the accuracy of expectations.

The International Financial Crisis of 2008

The central feature of the biggest financial crisis since the Great Depression (which is why it has been informally given the "honourable" title of the Great Recession) has been the remarkable disparity between the insignificance of the initial event—problems in the U.S. subprime mortgage market—and the enormity of the turmoil experienced by the global financial system and, by extension, the world economy. It took time to move from superficial explanations of the crisis to identifying its underlying causes. Of course, the mechanism of the crisis involved a large number of complementary and interrelated factors, but some studies have nevertheless attempted to identify the most fundamental of these.

An analysis of the impact of a broad set of 200 variables on output, the labor market, and other key macroeconomic indicators in the United States in 2007–2009 showed that the crisis downturn in output was mainly determined by two groups of factors: disruptions in the financial system and increased uncertainty (Stock, Watson 2012). The leading role of deteriorating financial conditions and uncertainty was supported by other authors. For example, Caldara et al. (2016) considered as a characteristic of financial shocks the measure of "additional corporate bond yield" proposed by Gilchrist, Zakrajsek (2012), which indicates the change in the average spread of corporate bonds in a representative sample relative to risk-free government bonds with similar payment schedules. At the same time, uncertainty was described by six indicators of different types, including stock market volatility, economic policy uncertainty, discrepancy between experts' macroeconomic forecasts and others. The analysis allows us to draw the following conclusions about the influence of the factors considered on the economic activity and financial markets of the U.S. during the Great Recession:

1. Financial shocks had a significant negative impact on industrial production and stock market indices.
2. All six uncertainty indicators showed a negative effect on the same indicators, but only one indicator significantly improved the accuracy of the description compared to using only financial shocks, developed by Jurado (2015).
3. Combined, financial shocks and uncertainty according to Jurado (2015) accounted for almost all of the decline in industrial production and stock indices observed during the Great Recession.
4. The impact of these two factors was roughly the same.

5. The impact of uncertainty on the economy is particularly large during periods of disastrous financial conditions (in other words, financial stress and uncertainty shocks have a synergistic negative effect).

In summary, we can conclude that increased uncertainty explains about half of the negative impact of the Great Recession in the United States.

Financial Crises and Evolution of Russian Macroeconomic Policy

The examination and analysis of the factors most closely associated with the subsequent onset of a crisis allows us to identify the following main triggers and conditions for the development of financial crises.

A. Significant macroeconomic imbalances (large budget or current account deficits, excessive government debt, predominance of short-term or external borrowing, overvalued exchange rate, etc.).
B. Unsound macroeconomic policies (such as senorage-financed fiscal deficits).
C. Credit booms and financial bubbles.
D. Terms of trade shocks.
E. External "contagion."
F. Self-fulfilling negative investor expectations (including panic).
G. Adverse uncertainty shocks.
H. Inflexible macroeconomic arrangements (e.g., fixed exchange rate that does not respond to external shocks or investor sentiment shifts).
I. Low confidence in the government's (central bank's) fiscal (monetary) policy.
J. Economic policy uncertainty.
K. Low stock of budget or foreign exchange reserves.
L. Banking system weaknesses (e.g. imbalance of currency assets and liabilities).

Typically, a crisis occurs when some of the "active sources" (items A–G) combine with some "favourable conditions" (H–L). Consequently, the task of preventing a financial crisis is to eliminate both the sources and the conditions for their development. The crucial point is that while the models assume that there are values of fundamental indicators at which a self-fulfilling expectations crisis is impossible, in real life there are several potential channels of crisis development operating simultaneously, so that it is impossible to provide complete protection for a country by strengthening positions in certain areas. In particular, strong fundamentals cannot compensate for a country's unsound macroeconomic policies, and investor confidence cannot protect against a crisis with weak fundamentals. This is confirmed by many of the cases discussed above, as well as by the impact of the 2008–2009 international crisis on Russia.

Let us now focus on the issues of Russia's anti-crisis policy. Which of the above mechanisms played a significant role in Russia's recent major financial crises? Between 1998 and 2019, the Russian economy experienced three major financial crises: in 1998, 2008–2009, and 2014–2015.[3] In all three cases, the initial shock was a sharp fall in oil prices. In all cases, the period between the start of the GDP decline

[3] The 2020 crisis did not have an economic root cause, which means it is not entirely comparable with the others, thus it is not included in our brief comparative analysis.

and its end was about one year. Table 3 (p. 18) summarizes the size of the external shock and the main economic consequences of the crisis within the four quarters of the crisis downturn.

Table 3. Dimensions of the oil shock experienced by the Russian economy and the consequences of the crisis

	Q1-Q4 1998	Q3 2008 – Q2 2009	Q3 2014 – Q2 2015
Urals price change*	-44%	-50%	-42%
GDP decline*	-9.1%	-11.2%	-3.1%
Range of fluctuations of USD exchange rate for the period**	246%	52%	105%

* Last quarter of the crisis period compared to last quarter before the onset of the crisis

** Maximum change during the crisis period

According to the above analysis of the 1998 crisis, the significant elements of its overall framework included items A, C, G, H, I, K. Taking into account the analysis in Gurvich, Prilepskiy (2010) and Gurvich (2016), the significant elements of the 2008–2009 crisis can be attributed to items C, D, H, I, and the third crisis, only to item H (terms of trade shock). The gradual elimination of potential sources of the crisis allowed to reduce the magnitude of the crisis GDP downturn.

A comparison of the conditions that the Russian economy faced on the eve of these three crises and their consequences proves that the government and the Bank of Russia learned some valuable lessons and implemented a number of policy changes that made the economy less vulnerable to further shocks. We will briefly summarize the changes in macroeconomic policy that were made after each of the crises.

1999–2008

- In just two years, fiscal consolidation was achieved by cutting government spending rather than raising taxes: according to the IMF, Russian budgetary expenditure fell from 39.7% of GDP in 1998 to 30.7% in 2000 (i.e. by 9 percentage points!). Instead of a deficit of 7.4% of GDP, the consolidated budget turned into a surplus of 3.1% of GDP. Subsequently, the budget deficit exceeded 4% of GDP only once (in the year of the Great Recession), while the average budget balance between 2000 and 2022 was positive at 0.9% of GDP.
- Fiscal rules have been introduced to insulate the economy from fluctuations in the external environment. This is achieved by accumulating surplus oil and gas budget revenues in the Stabilization Fund (later Reserve Fund) when oil prices are high and using them when prices are low. The budget rules though have undergone numerous changes and their application has been suspended several times during crisis periods.

- The flexibility of the exchange rate policy was increased: the currency corridor regime was replaced by a managed float.
- Public debt has been reduced substantially (from 51.5% of GDP at the end of 1997 to only 8.0% of GDP at the end of 2007).[4]
- Significant fiscal and foreign exchange reserves have been accumulated.

At the beginning of the international financial crisis in 2008, Russia seemed to have all the chances to be a "safe haven" in the midst of the storm. In reality, the economy experienced a deep recession (by 7.8% in 2009) and was among the ten worst in a sample of 172 countries in terms of GDP decline compared to its pre-crisis trajectory (Gurvich and Prilepskiy 2010). The main reason for this seems to have been the continued low flexibility of exchange rate policy in the first months of the crisis: despite a threefold drop in oil prices in August–December 2008, the central bank held back the weakening of the ruble throughout this period. This helped banks to buy foreign currency cheaply and protect their balance sheets from losses in the event of a subsequent ruble depreciation. But the downside of this policy was a credit squeeze as the "opportunity cost" of money rose. As in 1998, investors expected a subsequent devaluation. As a result, in December 2008, the estimated yield on six-month futures contracts for delivery of dollars was 29% per annum—under such conditions, the rate of lending to the real sector could not be lower than this yield on virtually risk-free speculative operations. It is difficult to assess the magnitude of the risks to the banking system, but the negative impact of the central bank's exchange rate policy on output was certainly significant, no wonder that the largest fall in output was recorded during the second crisis. In fact, despite the change of regime, the exchange rate policy was similar to that of the first crisis: the Central Bank artificially maintained an exchange rate that did not correspond to the terms of trade (Gurvich 2016). Moreover, the Bank of Russia lost a third (almost $200 billion) of its foreign exchange reserves during the crisis year. It should also be noted that the government not only covered the entire shortfall in budget revenues at the expense of the Reserve Fund, but also significantly increased expenditures. However, the budget surplus did not inspire confidence among investors, and the targets were met only by using gold and foreign exchange reserves and the Reserve Fund.

2009–2014

- The central bank announced a gradual transition to a floating exchange rate policy and inflation targeting (the transition was completed in November 2014).
- The government adjusted the fiscal rule to run the consolidated budget in surplus or with a small deficit (within 1% of GDP).
- Basel 2 standards have been gradually introduced, increasing the stability of the banking system.

[4] According to the IMF.

In 2014, financial and sectoral sanctions were imposed on Russia, and in August 2014 oil prices began to plummet, more than doubling in just six months. However, the macroeconomic policies pursued this time were radically different from those in previous crisis periods. In general, the evolution of macroeconomic policy during the crisis periods can be described as follows. In 1998, the government tried to keep the main macroeconomic indicators (exchange rate, budget deficit) stable despite a sharp drop in oil prices. In 2008–2009, the government and the Bank of Russia pursued similar goals, but the fundamental difference was that they had a large "safety margin"—budget surplus, current account surplus, and large reserves.

In 2014–2015, the authorities took a very different approach. Instead of trying to keep macroeconomic parameters unchanged despite a dramatic change in fundamental conditions, they set themselves the task of moving as quickly as possible to a new equilibrium in line with the new conditions. This approach ensured much greater investor confidence, which, as shown above, was reflected in a moderate decline in GDP compared with previous crises.

In general, macroeconomic policy has become much more prudent since 1998: it combines the maintenance of sufficient "fiscal space" with flexibility, and its objectives and approaches are actively communicated to investors. Both the government and the Bank of Russia deviate from announced policy guidelines only in exceptional circumstances, which increases the effectiveness of their measures. At the same time, the problem of the economy's continued dependence on hydrocarbon exports remains unresolved.

The start of the special military operation in 2022 and the subsequent waves of economic sanctions have significantly increased economic and political uncertainty (as illustrated by the geopolitical uncertainty estimates above). At the same time, however, the openness of Russian financial markets to cross-border transactions has declined sharply, which is not conducive to economic growth but (other things being equal) reduces the likelihood of a crisis. Thus, one of the priorities of Russian economic policy should be to restore confidence in the policies of the Ministry of Finance and the Central Bank and to reduce the increased uncertainty.

Conclusions

To prevent potential financial crises and to mitigate the impact of crises when they occur, it is crucial to consider the role of intangible factors. They complement and reinforce fundamental factors, with a particularly strong effect when financial shocks are combined with increased uncertainty. Some conclusions can be drawn from the above analysis.

- Investor confidence in government and central bank policies is no less important than improving economic fundamentals in preventing financial crises.
- This requires, in particular, that the authorities systematically pursue consistent, transparent, and predictable policies and minimize discretionary measures.
- The introduction and strict implementation of fiscal rules, monetary policy rules, the development of long-term macroeconomic forecasts, etc. can play an important role in enhancing confidence.

- The central bank should prevent "credit booms" and "bubbles" (which often occur during periods of loose monetary policy), which are the most typical sources of financial crises.
- In the event of heightened crisis risks, protecting the economy from external contagion should be a priority. It is also necessary to avoid, as far as possible, the creation of additional internal sources of uncertainty about economic conditions and economic policy.
- Strong fundamentals are important not only as a "margin of macroeconomic strength" but also as a signal to investors that speculative attacks are futile.
- Macroeconomic policy (MP) flexibility plays a key role in crisis prevention and adjustment: the use of automatic stabilizers and the ability to react quickly to external and internal shocks.
- When designing anti-crisis policies, it is important to remember that the effectiveness of MP depends crucially on the level of uncertainty and confidence of economic agents. In conditions of high uncertainty, the impact of any measures taken to support the economy is drastically reduced.
- Every effort should be made to align MP with 'investors' assessments and expectations. It is extremely dangerous to pursue a policy contrary to 'investors' expectations in a crisis period, even if there are substantial fiscal and foreign exchange reserves, and even more so if they are limited (as was the case in Russia in 1998).
- It is necessary to create a wide range of indicators characterizing the main intangible factors and, based on them, monitor the state of uncertainty of economic conditions, economic policy, confidence of economic agents, etc. Deterioration of such indicators should serve as a basis for rapid and significant response measures.

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Threshold Features in the Historical Evolution of the U.S. Economy, or Whether Parallels between the 1930s-1940s Period and the Present Time Are Appropriate?

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For citation: Vasiliev, Vladimir, 2023. Threshold Features in the Historical Evolution of the U.S. Economy, or whether Parallels between the 1930s-1940s and the Present Time Are Appropriate? *Contemporary World Economy*, Vol. 1, No 2.

DOI: https://doi.org/10.17323/2949-5776-2023-1-2-28-45

Keywords: economic threshold, Great Depression, World War II, stagflation, scientific and technological revolution

The article is based on the paper presented at the XXIV Yasin (April) International Academic Conference on Economic and Social Development, HSE University, Moscow, April 4–14, 2023.

Abstract

Using historical analogies, this paper analyses the situation of the American economy and society in the early 2020s. The situation is characterized by an unprecedented combination of the deepest economic crisis since the end of the Second World War, caused by the coronavirus pandemic, and severe domestic political turmoil. The crisis has led to a discussion in American society about whether the country is likely to slide into a Civil War. The situation in the United States in the third decade of the 21st century is analyzed in terms of American society approaching a threshold period in its historical and economic evolution, which may mark a radical transformation in the functioning of all public spheres, from the technical and economic to the spiritual and value spheres. The "threshold" patterns and peculiarities of the development of the American economy and society are based on the jump-like nature of their future functioning, which can "throw" the

United States into a fundamentally different qualitative dimension. In the past, the U.S. already crossed a similar kind of threshold between 1929 and 1945, which has also been analyzed in detail in order to establish an empirical analogue for understanding the peculiarities of crossing the "second" threshold.

Introduction: Qualitative Leaps in the Development of Economic Systems

Two basic patterns can be identified in the broad historical evolution of the U.S. economic system, and indeed of any major highly developed economy in the world. In the first model, the progressive development of the economic system is relatively slow during a long period of comparatively stable economic growth rates, which predetermines a smooth increase in the "angle" of the trajectory of transition from the past mode to a new scientific and technological structure. Within the framework of the second model, the progressive development of the economic system occurs in an abrupt manner, predetermining a steep trajectory of transition from one state of the socioeconomic system to another. In turn, the steep trajectory of transition from the initial state of the socioeconomic system to a qualitatively different state actually implies a relatively rapid transition to a different spatial and temporal dimension in historical terms, which implies deep qualitative transformations of virtually all parameters of the socioeconomic and political system.

Modern modeling of the jump-like form of transition from the current to the qualitatively new state of the social and economic system is implicitly based on our proposed idea of the existence of a threshold on the trajectory of historical development of the social system, which acts as a kind of barrier on the path of its progressive development.

We define the threshold in social development as a two-stage transition from an initial state of the social system to a fundamentally new dimension, characterized by a qualitative transformation of most parameters of socioeconomic and political development. The first phase of the threshold state of a social system is characterized as a period of simultaneous growth of stagnation phenomena in its development: a slowdown in economic growth and scientific and technological progress, even up to the onset of a long-term economic crisis and economic depression, a sharp aggravation of political contradictions, sometimes up to the emergence of serious civil unrest, a fundamental shift in the system of social value orientation, which creates a sense of the coming radical transformation of the entire world.

The second phase can be characterized as the transition of society, in a comparatively short period of time, to a qualitatively new state, the end of which marks the emergence of a system of fundamentally new sustainable factors of progressive social development, based on a qualitatively new scientific and technological structure and a new system of spatial and temporal coordinates. Overcoming the stagnation phase usually occurs suddenly, after which the socioeconomic system enters a fundamentally new trajectory of its development in the broad sense of the word.

As a special illustration of the threshold patterns of social development, an interpretative model of the peculiarities and specifics of the development of the United States between 1929 and 1945 is presented, which is interpreted as the period when American society crossed the threshold of its civilizational development. The historical development of the United States in the period from 1929 to 1945 can be presented in the form of two interdependent phases: 1) the period of the Great Depression from 1929 to 1939, and 2) the period of preparation for and participation in the Second World War from 1939 to 1945. During the Great Depression period from 1929 to 1939, U.S. GDP, measured in current prices, fell by about 45.0% from $105 billion to $57.2 billion during the economic crisis of 1929–1933, and then began a slow recovery, not reaching the 1929 level until 1940, when it equaled $103.0 billion. After the outbreak of the Second World War in September 1939, the United States began to increase its military expenditure, thus starting the process of gradual transformation of the civilian economy into a military one, and the entry of the United States into the war in December 1941 and the establishment of a fully-fledged military economy eventually led to the fact that in 1945, i.e. at the end of the Second World War, the U.S. GDP reached a record high of $228.0 billion, an unprecedented increase of 2.2 times compared to 1940 (Bureau of Economic Analysis. Table 1.1.5). The model of the development of the U.S. economy in the period 1929–1945 is shown in Figure 1 (p. 29).

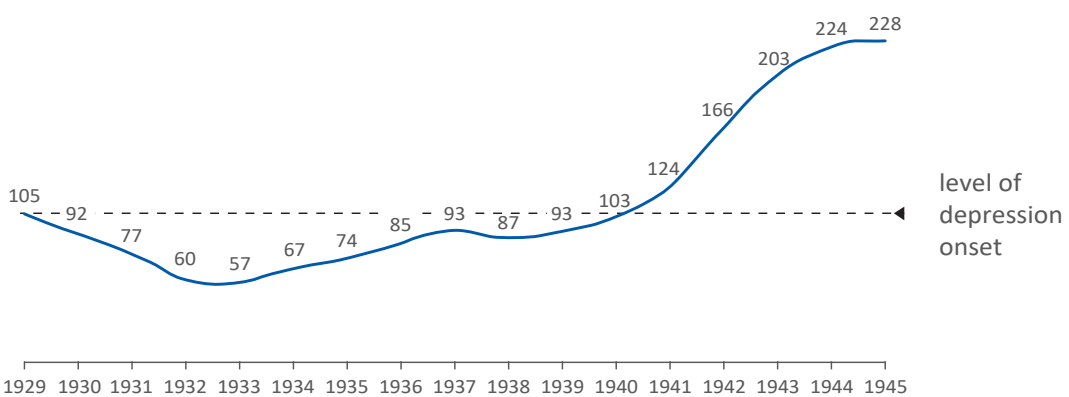

Figure 1. Model of the U.S. economy between 1929 and 1945 (GDP change in billions of dollars).

Source: Bureau of Economic Analysis. Table 1.1.5.

The figure gives a clear picture of the characteristics and shape of the threshold that the U.S. crossed between 1929 and 1945. The Great Depression and the stagnation in the dynamics of GDP change clearly indicate the presence of a powerful barrier to the progressive development of the economic system of American society, the first phase. And GDP growth in the period between 1940 and 1945 is a clear illustration of the practical possibility for the economy to make a "leap" within a relatively short historical period, of course, with a radical change in external and internal conditions, which

for the United States was the Second World War—the second phase. At the same time, the American experience of crossing the threshold in the period 1929–1945 illustrates a number of fundamentally important features and characteristics of the threshold condition, where an almost "alchemical" metamorphosis of quantitative parameters into their fundamentally different qualitative state takes place, which the 1930s, the "New Deal" and the exit to a new type of development, which in Marxist theory was called "state-monopoly capitalism," and to which many books of all directions are devoted.

The treatment of the peculiarities of U.S. social development in the period 1929–1945 developed in this article from the standpoint of our threshold theory is fundamentally new in the socioeconomic literature. Modern American macroeconomic theories use the concept of an "economic threshold" in a very fragmentary form. Well-known American economists, under the influence of the global financial and economic crisis of 2007–2009, openly spoke about the fact that the upward or downward trajectories of economic development directly depend on and are determined by the existence of thresholds (barriers) that predetermine the degree of effectiveness of the globalized integration of individual countries, and this in turn directly affects the rate of economic growth.

According to the American economists A. Kose, E. Prasad, and E. Taylor, "the main difficulty in the area of global financial integration lies in the fact that there appear to be certain 'thresholds' of financial and institutional development that an economy must reach before it can reap all the indirect benefits and reduce the risks of liberalizing its capital account. From this perspective, it becomes clear why developed countries, which tend to have better institutions, more stable macroeconomic policies and more developed financial markets than developing countries, are the main beneficiaries of financial globalization" (Kose et.al. 2009: 2). The financial thresholds crossed by the developed countries, especially the U.S., separate them in many ways from the mass of developing countries.

This conclusion, in turn, builds on the earlier work of this author's team, which concluded that initial thresholds need to be created for financial globalization to be successful and, in particular, identified the "relative importance of different thresholds" for a country's subsequent economic development (Kose et. al. 2010: 4345). From a broader perspective, we can conclude that overcoming the economic threshold is the most important initial condition for the sustainability of the subsequent trajectory of economic development and the degree of its steepness. The differences in the degree of success of financial globalization recorded in the 21st century with respect to countries with different levels of socioeconomic development indicate that developed countries (and this situation applies primarily to the United States) have already successfully crossed this threshold at the previous stages of the historical development of their economic systems, which effectively determines their dominant positions in the modern global economy.

F.D. Roosevelt's Economic Policy: From Doctor "New Deal" to Doctor "Win-the-War"

In late December 1943, during a press conference, President F.D. Roosevelt expressed his policy stance regarding the fundamental change in the direction of his administration's

social and economic policy after the outbreak of the Second World War. F.D. Roosevelt made it unequivocally clear that the practice and ideology of the "New Deal," the proclamation of which had been the decisive factor in his victory in the presidential elections of 1932 and 1936, was finished, and that it would be replaced by the practice and ideology of the "Win-the-War" doctrine, which would probably determine the future socioeconomic and political development of the United States after the end of the Second World War.

Resorting to his favorite method of diagnosing the socioeconomic problems of American society from a medical point of view, the 32nd President of the United States compared America in 1932–1933 to a "sick patient" suffering from "grave internal disorders." At that time, America needed a doctor, and he came in the form of the Dr. New Deal. He was a therapeutic doctor who "cured" American society for a long 6–7 years, but after a course of treatment, "the diseases were cured" (The American Presidency Project 1943). However, in December 1941, when Japan attacked the American naval base at Pearl Harbor (Hawaii) and the U.S. declared war on December 8, Roosevelt continued, "Patient America" had a very serious accident—he "broke his hip, broke his leg in two or three places, broke a wrist and an arm, and some ribs. And then he began to 'come to'; and he has been in charge of a partner of the old doctor. Old Dr. New Deal didn't know 'nothing' about legs and arms. He knew a great deal about internal medicine, but nothing about surgery. So he got his partner, who was an orthopedic surgeon, Dr. Win-the-War, to take care of this fellow who had been in this bad accident. And the result is that the patient is back on his feet. He has given up his crutches. He isn't wholly well yet, and he won't be until he wins the war" (The American Presidency Project 1943).

In the course of his speech, F. Roosevelt focused on two fundamental points. First, he stressed that the first priority was "plan for, and help to bring about, an expanded economy which will result in more security, in more employment, in more recreation, in more education, in more health, in better housing for all of our citizens, so that the conditions of 1932 and the beginning of 1933 won't come back again." Secondly, the New Deal was "a program to meet the problems of 1933. Now, in time, there will have to be a new program, whoever runs the Government. We are not talking in terms of 1933's program. We have done nearly all of that, but that doesn't avoid or make impossible or unneedful another program, when the time comes" (The American Presidency Project 1943).

By the end of the 1930s, it became clear that the New Deal reforms were unable to ensure the progressive development of the American economy; indeed, they became the main obstacle to progressive economic growth. In May 1937, the economy fell into a recession that lasted a year, with the low point of the downturn being recorded in June 1938. [NBER]. The American press of the time immediately dubbed it the "Roosevelt recession" and it was the third deepest economic crisis in the first four decades of the twentieth century. Real GDP fell by 11.0%, unemployment rose to 19.0%, and industrial production fell by 32% (Irwin 2011). Modern interpretations of the causes of the 1937–1938 recession, which ascribe it to a kind of historical mystery, link it not so much to restrictive fiscal and monetary policies as to the fact that in the United States during this period, from late 1937 to mid-1938—the inflow of gold from Europe was completely

halted, and only resumed in the autumn of 1938 after the accession of the Sudetenland of Czechoslovakia to Germany (Irwin 2011).

The New Deal's reform agenda was finally put to rest in the mid-term elections of autumn 1938, which resulted in the defeat of the Democratic Party, which lost eight seats in the Senate and a record 72 seats in the House of Representatives, although it retained control of both houses of the U.S. Congress. As a direct consequence of the results of the 1938 midterm elections, in 1939, "for the first time during his presidency, Roosevelt did not send a single new reform bill to Congress" (Busch 2006).

The fundamental cause of the "halt" in reformist efforts under the New Deal lies in its general thrust. The stagnating American economy of the 1930s did not provide F. Roosevelt and his supporters of socioeconomic reforms with any other forms of expansion of social programs and the state's presence in the economy than the extensive use of a mechanism of redistribution of national income—from the wealthiest strata of American society, of course, to the benefit of the "poor and downtrodden." The first step in this direction was taken in August 1935 with the adoption of the Social Security Act, which was partly financed by a special tax on the rich, set at 75% of the income of taxpayers with an annual income of over $5 million (Leuchtenburg 1963: 154). In fact, the recession of 1937–1938 was perceived in F. Roosevelt's entourage as "revenge and a warning from Wall Street" with regard to further possible policies of "socialization" of American society.

At the end of the 1930s, F. Roosevelt and his administration found themselves at a historical crossroads: the continuation of the reform initiatives of the New Deal objectively led to a "class struggle" in American society, and the shift from domestic to foreign policy meant the gradual involvement of the United States in the Second World War. In the figurative terminology of F. Roosevelt himself, Dr. "Win-the-War" firmly replaced Dr. "New Deal": the question was whether F. Roosevelt would win the war that was taking place inside or outside the United States. In the early 1940s, F. Roosevelt made a clear and irrevocable choice in favor of gradually dragging the U.S. into another global military conflict, believing, not without reason, that in this war the U.S. had a strategic advantage in exploiting and building up its "arsenals of democracy."

The second phase began in FY1940 with an increase in U.S. military expenditures from $1.4 billion to $1.8 billion (in current prices) compared to FY1939, an increase of about 30.0%, followed by a 3.6-fold increase in FY1941 compared to FY1940, reaching $6.4 billion. The United States' entry into the war in December 1941 led to a dramatic increase in military spending, which peaked in fiscal 1945 at nearly $83.0 billion (U.S. expenditures...). In relative terms, U.S. military spending did not exceed 2.0% of GDP in the late 1930s, but reached 37.0% of GDP by the end of the Second World War. In the priorities of the federal government, military spending rose from 18.0% in FY1940 to 90.0% in FY1945 (Budget of the U.S. Government. Historical Tables. Table 6.1). The build-up of U.S. military power began long before the official entry of the U.S. into the Second World War and took place in several directions. On 16 May 1940, in his speech to Congress on the need for a sharp increase in defense spending, F. Roosevelt shocked American lawmakers with a plan to create a powerful air force by increasing the annual production of aircraft to 50 thousand units (The American Presidency Project 1940). After the fall of France and the defeat of the Franco-British forces at Dunkirk, the United States began to mobilize the U.S.

armed forces (peacetime conscription), which increased from 190,000 soldiers in 1939 to 269,000 in 1940.By the end of the Second World War, the number of American troops had risen to 8.3 million (The National WWI Museum. Research Starters...).

On 11 March 1941, F. Roosevelt signed the Lend-Lease Act, which gave the government the right to "furnish or lease to any country any military equipment essential to the vital defense interests of the United States." In effect, the Lend-Lease Act, which at the time extended its acceptance to Great Britain, signified the de facto entry of the United States into the Second World War, while formally maintaining its status as a neutral power (National Archives).

And finally, on 9 October 1941, F. Roosevelt instructed V. Bush, the director of the Office of Scientific Research and Development, created by presidential decree at the end of June 1941, to begin work on the development of the atomic bomb as part of a top-secret scientific and technological project called the Manhattan Project, despite the fact that at that time "the United States was still technically a neutral nation in October 1941, yet Roosevelt became the first national leader to commit his nation to the effort to achieve a nuclear device. In so doing, he also decisively changed the nature of the relationship between American government and American science, a cultural change that has persisted to the present day." (The National WWII Museum. FDR Approves ...).

The dramatic "transformation" of New Deal strategy and tactics, from the "socioeconomic Keynesianism" of the 1930s to the far-reaching "war Keynesianism" of the first half of the 1940s, is well illustrated by a 1943 cartoon widely circulated in the United States. The socioeconomic reforms of the New Deal were depicted as a spent horse being put out to pasture, while the war economy was portrayed as a powerful vehicle for America's progressive development.

The wartime transformation of the American economy onto a fundamentally new scientific and technical footing enabled the U.S. to produce almost 300,000 aircraft, over 1,500 warships and submarines, 88,000 tanks, 634,000 jeeps, almost 6,000 naval vessels, 6.5 million rifles and other types of small arms in the period 1940–1945 (Statesman & Commander in Chief ...). The U.S. military economy contributed most directly to the transition of the U.S. economy to a new technological form, based on the fact that modern science became a real productive force. As the domestic researchers Prof. Leonid Grigoryev and Prof. Alexander Astapovich have rightly pointed out, "Roosevelt was apparently the first to massively introduce intellectuals into the management of the country, and they not only lasted his two presidential terms, but also created a precedent that was often used in other countries and cases" (Grigoryev, Astapovich: 117).

In July 1945, V. Bush formulated this thesis in a report addressed to the President of the United States, "Science The Endless Frontier" (Bush 1945). On 16 July 1945, the United States carried out the world's first successful atomic bomb test in the Alamagordo desert (New Mexico), thus marking the final phase of the crossing of the economic threshold. The creation of fundamentally "esoteric" types of technology based on the mastery of unprecedented types of energy, which is more in the realm of science fiction, should also be seen as an inherent property of threshold principles in the development of science and technology, in which a qualitative leap in scientific and technological progress is a symmetrical function of the economic leap.

The 2020s: Stagflation Is the First Threshold Phase for the American Society

We suggest that at the beginning of the third decade of the 21st century, the United States entered a relatively long period of economic stagnation, a combination of external shocks and internal structural imbalances, forming the first phase of the "threshold." The coronavirus pandemic that struck the U.S. in early 2020 quickly caused real GDP, measured at constant 2017 prices, to fall by 4.6% as early as the first quarter, but the real shock to the U.S. economy came in the second quarter, when the U.S. officially quarantined the economy, resulting in a 29.9% decline in real GDP (Bureau of Economic Analysis. Table 1.1.1.), the deepest quarterly decline in 70 years since the Great Depression (Economic Report of the President 2022: 100).

And despite the fact that real GDP grew by an unprecedented 35.3% in the third quarter, the overall decline in GDP in 2020 was a record 2.8%, the largest decline in real GDP since 1946, when it was 11.6% (Bureau of Economic Analysis. Table 1.1.1.).

The specter of the Great Depression, combined with the forthcoming presidential election that Republican President D. Trump was determined to win "at any cost," led the Federal Government, by then under the J. Biden Democratic Administration, to allocate an unprecedented amount of budgetary resources in 2020 and early 2021 to overcome the economic crisis caused by the coronavirus pandemic. The total amount of funding amounted to $5.4 trillion. The list of laws enacted, their characteristics and the amounts appropriated are shown in the table below.

Table 1. Fiscal measures taken by the U.S. Federal Government to deal with the economic crisis in 2020–2021

Legislation adopted	General description of economic support measures	Amount of funds allocated, in billions USD.
Coronavirus Pandemic Supplemental Appropriations Act, 6 March 2020	Funding for antiviral vaccine development and testing	8.3
Families First Coronavirus Response Act, 18 March 2020	Funding for medical and food assistance programs for American families	192.0
Coronavirus Aid, Relief, and Economic Security Act (CARES Act), 27 March 2020	Financial compensation for income losses to families, the unemployed, and small and medium-sized businesses caused by the coronavirus pandemic	1756.0
Paycheck Protection Program and Health Care Enhancement Act, 24 April 2020	Additional funding for the Coronavirus Aid, Relief, and Economic Security Act	484.0
President D. Trump's Executive Orders	Additional payments to the unemployed, student loan debtors, renters and homeowners	174.0
Consolidated Appropriations Act, 27 December 2020	Assistance to the unemployed, funding for antiviral vaccine programs, support for transportation and the recreational services industry	915.0
American Rescue Plan Act of 2021, 27 March 2021. (J. Biden Administration)	Financial support for homeowners, the unemployed, local and state governments, businesses and the health care system	1821.0
Total		**5350.3**

Source: Moody's Analytics: 5.

However, the immense budgetary injections into the economy, aimed at keeping it afloat and perhaps even bringing it to a relatively rapid recovery on a sustainable economic growth trajectory, have resulted in the U.S. economy breaching the 2.0% annual rate of inflation, as measured by the Consumer Price Index (CPI), set by the Federal Reserve Board in January 2012, in March 2021. (Board of Governors of the Federal Reserve System 2020). Over the next 15 months, inflation in the U.S. continued to accelerate, reaching a peak of 9.1% (annualized) in June 2022—the highest rate since the early 1980s (Monthly 12-month inflation rate ...). The main reason for the inflationary "overheating" of the American economy was (and still is) the fact that the overwhelming majority of the total $5.4 trillion in fiscal support for the economy has gone to fuel the current consumption of the American population. Having realized in early 2022 that inflationary processes were almost completely out of the monetary regulator's control, the Fed began to aggressively raise the federal funds rate, which was increased from an initial 0–0.25% to 5.25–5.50% between March 2022 and July 2023 (Board of Governors of the Federal Reserve System. Policy Tools. Open Market Operations).

The impact of the Fed's strong interventionist policy on the economy was immediate: in the first and second quarters of 2022, real GDP fell by 1.6% and 0.6%, respectively (Bureau of Economic Analysis. Table 1.1.1). It has become clear that the Fed, in its policy of containing inflation, is balancing between a soft and a hard "landing" for the U.S. economy, i.e. choosing between a mild and short recession and a major economic crisis (Verbrugge, Saeed 2023: 30-31), which is directly related to and stems from the basic policy stance of the current leadership of the Fed on the need to return to the annual inflation target of 2.0% (Board of Governors of the Federal Reserve System 2023: 40). The low growth rates in the U.S. in 2022–2023 take place against the backdrop of the Fed's maneuvering between reducing inflation and avoiding a recession.

In this context, U.S. analysts point out that the socioeconomic conditions in the U.S. economy are radically different from those of the second decade of the current century and that the most optimal inflation target is currently 3.0% (Verbrugge, Zaman 2023: 7). By the late summer of 2023, inflation in the U.S. has fallen to 3.7%, but nevertheless the Fed, based on the difference between the price quotations of long-term and short-term U.S. Treasury securities, forecast the probability of a recession in the U.S. in the period to September 2024 at almost 57.0%, the highest level since the early 1980s. The Fed's forecast of the probability of a U.S. recession in the period to September 2024 is shown in Figure 2 (p. 36).

Inflation in the current U.S. economy plays an important role in the first phase of the threshold, which hinders further progressive development of the U.S. economy and determines the stagnant nature of its current state. It is also fueled in no small part by the sharp increase in the monetary base of the U.S. economy in 2020, which in terms of aggregate M2 was $20.9 trillion in August 2023 (Board of Governors of the Federal Reserve System. September 26, 2023. Table 1), i.e., comparable to the size of GDP, as well as the Fed's balance sheet, which was $4.7 trillion in March 2020, but quickly almost doubled by the end of 2020, reaching $8.1 trillion by late September 2023. (Board of Governors of the Federal Reserve System. September 28, 2023). In this context, it can be said that the U.S. is currently essentially deprived of the usual monetary policy levers developed since

the Second World War, as evidenced by the Fed's policy of raising interest rates against a background of clearly manifest recessionary phenomena, as was the case in the first half of 2022.

In relative terms, the fiscal injections of $5.4 trillion in fiscal years 2020–2022, reaching 23.4% of GDP, contributed to the increase in the Federal Government's gross debt pyramid (Economic Report of the President 2022: 50), which exceeded the $33.5 trillion mark in early October 2023 (U.S. Department of Treasury). The rapidly growing pyramid of the Federal Government's gross debt is a clear symbol of a powerful barrier to the further development of the U.S. economy. The economic crisis of 2020 and the subsequent measures taken by the J. Biden Administration to overcome it have irreversibly unbalanced the U.S. federal financial system, with chronic and ever-increasing federal budget deficits of at least $1.5 trillion per year becoming its "new normal." According to CBO projections through FY2033, budget deficits will rise to $2.0 trillion in FY2030 and nearly $3.0 trillion in FY2033 (CBO. June 2023: 5).

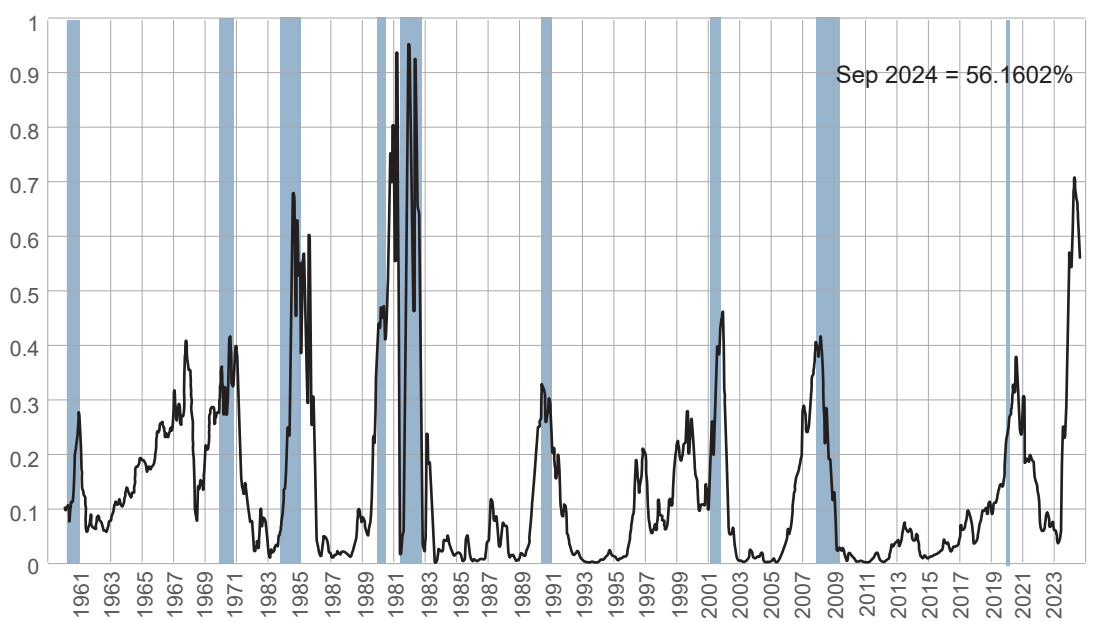

Figure 2. U.S. Federal Reserve's forward-looking estimate of the probability of a recession in the U.S. economy in the period up to September 2024, in %

Source: Probability of U.S. Recession...

Such a trajectory of progressive growth in budget deficits also implies that at the onset of the next economic shock, the federal financial system will impose an even greater additional budgetary burden on the U.S. economy, which will determine both the tendency to move to sustainably higher and higher absolute and relative levels of budget deficits and the growth of the federal gross debt pyramid, which in turn will imply an increasing slowdown in economic growth rates up to the level of the federal budget

deficit. Specifically, the CBO has estimated that the U.S. economy is already experiencing annual losses of between $500.0 billion and $600.0 billion in produced GDP (CBO. June 2023: 5). However, under all variations in the size of the budget deficits over the 10-year medium term, the federal government's gross debt would grow faster than the economy and could exceed $52.0 trillion in absolute terms by fiscal year 2033 (CBO. May 2023: 7). As a result, the Federal Government's gross debt-to-GDP ratio could rise from its current level of 123.7% (as of FY2023) to 133.3% in FY2033 [Calculated from: (CBO. June 2023: 2,5)].

An increase in the debt burden on the economy clearly means slower economic growth because of 1) the crowding out of private sector investment by government borrowing, 2) higher interest rates to increase the attractiveness of government securities, 3) higher taxes needed to partially offset the increase in budget deficits and the proportional increase in the gross debt pyramid, and 4) higher inflation (Salmon 2021: 489-490). However, the most important factor in the depressive effect of the government debt pyramid on economic development is the existence of "thresholds" in the ratio of gross debt to GDP, beyond which GDP growth slows down sharply (non-linearly). Currently, such a threshold is considered to be a gross debt-to-GDP ratio of 100%, beyond which "the negative impact of a debt-burdened economy on its economic growth potential increases sharply," which can result in economic losses measured in trillions of dollars (De Rugy, Salmon 2020: 9-10).

The rapid growth of the federal debt pyramid is leading to a sharp increase in debt service costs (net expenditure paid), which is drastically reducing the ability of the United States to invest in the real sector of the American economy. In fact, the federal government's debt service has already reached a level comparable to direct military spending. The Congressional Budget Office (CBO) estimates that the cost of servicing the federal debt will reach a record $655 billion (2.6% of GDP) in the current fiscal year 2023. 655 billion (2.6% of GDP) in the current fiscal year (FY) 2023, will exceed $900.0 billion in FY 2027, and could reach an unprecedented $1.4 trillion (3.9% of GDP) in FY 2033 [Calculated from: (CBO. The 2023 Long-Term...: 7)]].

Crises in the system of federal finances significantly increase the risks of a series of short recessions or even a deep financial and economic crisis, which objectively leads to a slowdown in economic growth. According to the author's calculations, the average annual growth rate of the U.S. economy (in constant 2017 prices) was 1.94% between 2000 and 2009, and 2.24% between 2010 and 2019. 2.24% [Calculated from: (Bureau of Economic Analysis. Table 1.1.1)]. The improvement in real GDP growth in the second decade of this century can be explained by the fact that it was the period of the longest U.S. economic recovery since the end of World War II, lasting 128 months, while in the first decade of the 21st century the U.S. experienced two economic recessions, resulting in a recovery phase of only 72 months (CBPP. Chart Book 2023).

In the first three years of the third decade, between 2020 and 2022, the real GDP growth rate falls to 1.67% [Calculated from: (Bureau of Economic Analysis. Table 1.1.1)]. The Conference Board, a consulting firm, forecasts that U.S. real GDP growth will increase to 2.2% in 2023 before declining to 0.8% in 2024 (The Conference Board... 2023). The Fed also forecasts that real GDP growth will be 1.8% in the third decade of this century (Board of Governors..., Summary of Economic Projections: 2).

We can therefore conclude that the increase in the debt burden on the U.S. economy in the early 2020s has already translated into a noticeable slowdown in economic growth. The growth of the debt burden on the economy, as the U.S. experience in 2020–2023 shows, introduces serious distortions into the usual phases of the economic cycle, which objectively increases the probability that the U.S. economy can "slip from a late rise through a full set of phases of the cycle into a new investment slump with high inflation and anti-inflationary measures" of the Federal Reserve System (Grigoryev 2023: 26). These disruptions of the usual phases of the economic cycle are the surest symptoms of the reproduction of the threshold situation that developed in the U.S. economy at the turn of the 1930s and 1940s. Another important threshold symptom was the dilemma of facing either "domestic American terrorism" or geopolitical opponents in the form of Russia and China.

U.S. Strategic Choices: "Domestic Terrorists" v. External Geopolitical Adversaries

The events of January 6, 2021, known in the annals of American history as the Storming of the Capitol, profoundly changed the domestic political situation in the United States. Just as in the 1860s American society was divided between the North and the South, with the latter forming a union of thirteen rebellious states known as the Confederacy in 1861–1865, so today the United States is divided into "red" (pro-Republican) and "blue" (pro-Democratic) states. It is telling that the possibility of a new U.S. The Civil War is still being seriously discussed in the U.S. today, even in an influential academic journal such as Science, published by the American Association for the Advancement of Science. The publication was based on the occasional opinion polls published, according to which more than 40.0% of respondents believed that a second U.S. Civil War was likely to occur after or on the eve of the 2024 presidential election. In this case, the American scientists were inclined to see the main factor of its origin in the sharply increased level of firearms sales in America, as a result of which the number of gun homicides in the U.S. in the period between 2010 and 2020 rose by 43.0% (Ortega 2022: 357).

Today, as in the 19th century, the most important ideological factor in the political polarization of American society is the stereotypes that exist in the consciousness of the white majority, according to whom "about two out of five adults agree with the postulate of the white nationalist "theory of mass replacement" or with the idea that white voters born in the United States are being replaced by immigrants in order to gain electoral advantage" (Ortega 2022: 357).

In purely economic terms, the domestic political situation in the United States can be made explosive by the plans, officially approved by the U.S. Democratic Party, to pay historical reparations to the African-American population for 90 years of slavery and the subsequent 100 years of segregation and denial of rights. The total amount of these reparations is estimated at between $12.0 and $13.0 trillion (in 2018 dollars) (Jarvis 2021: 4), and it is clear that we are talking about a fundamental transformation of the economic mechanism of the American economy, in which the main priority will be the redistribution of income and accumulated wealth, rather than their expanded production.

The most alarming aspect of the current "threshold" situation in the United States, notwithstanding nuclear weapons, which would potentially rule out the use of the theaters of world wars to solve the entire spectrum of acute domestic problems, is that the American ruling circles are not faced with the problem of the strategy and tactics of "great power rivalry" and the rearrangement of the pieces on the "great geopolitical chessboard," but with the dilemma of choosing only between forms of warfare - extroverted (with the outside world) or introverted (within the country). Awareness of this dilemma can be clearly "read" in the Biden Administration's plans to sharply increase direct U.S. military spending, which is expected to rise to an average annual level of $900.0 billion in the foreseeable future (Budget of the U.S. Government. Fiscal Year 2024: 138), which is the highest level in the history of the United States since the Second World War.

We consider it quite obvious that it is impossible to achieve an optimal solution of the ratio of priorities between the internal "rear" and the external "front" in the conditions of growing financial and economic constraints for the progressive development of the American society, so the crisis and contradictions of the political system of the American society will only grow, which objectively requires the arrival of a strong national leader, which in his time was F.D. Roosevelt, who managed to lead America through two phases of the threshold in 1939–1945.

Conclusion: Are New Revolutionary Technologies on the Horizon?

The "threshold" in social and economic development implies, as an obligatory element, the development of breakthrough technologies, including the mastery of new forms of energy and technology that can fundamentally alter the geopolitical balance of power. After 1945, this was the mastery of atomic energy and the creation of nuclear weapons. There is evidence that attempts to develop such breakthrough technologies are still being made. In particular, American physicists are currently actively developing theories and looking for ways to experimentally use gravitational waves to master cosmic energy sources, which can be applied to the creation of new types of flying (antigravity) technologies (Baker Jr., Baker 2016). Taking into account these and other studies by American astrophysicists, it cannot be excluded that, as in 1942, the United States is currently organizing a top-secret research project, for example, on mastering space energy and creating new types of propulsion technologies.

Indirect evidence for the legitimacy of such historical analogies is provided by the organization within the Federal Government in 2021 of an interagency group for the study of unusual aerial phenomena, the results of whose work were transmitted to the U.S. Congress and the American public in January 2023 in a report by the U.S. Director of National Intelligence. This report stressed that it could be considered an established fact that these aircraft "appear to exhibit unusual flight characteristics or trajectories" (Office of the Director of National Intelligence 2022: 5), beyond the reach of even the most advanced examples of modern Earth technology. The successful implementation of such a "Manhattan Project" in the 21st century may be required to finally assert the U.S. claim to planetary dominance.

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International Migration Cycle and Its Effect on Remittance Flows

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For citation: Bondarenko, Ksenia, 2023. International Migration Cycle and its Effect on Remittance Flows, *Contemporary World Economy*. Vol. 1. No 2.

DOI: https://doi.org/10.17323/2949-5776-2023-1-2-46-74

Keywords: international migration, stages of migration, remittances, cross-country analysis.

Abstract

At present, according to the World Bank, the number of migrants (i.e. persons who live in a country other than their country of birth) is about 295 million people or 3.7% of the world population. At the same time, over the past 50 years, the number of migrants has more than tripled. The expansion of migration processes, as a rule, leads to an increase in the volume of remittances, both those sent by migrants to their family's homeland (to the migrants' donor country) and those received by the migrants themselves in the recipient country. This study examines the patterns of migration processes between the two countries (the migrants' donor country and the recipient country) and finds the three stages of migration cycle. The findings show that remittances depend on the stages of migration non-linearly. During the first stage, when migrants decide to migrate and start to leave the donor country for the recipient country, the volume of remittances sent by migrants to their homeland increases, and so does the volume of remittances in the opposite direction. During the second stage, when the recipient country becomes a key destination and the migrant diaspora expands significantly, the remittances sent by the migrants increase, while the received ones decrease or stagnate. During the third stage, when a degree of migrants' naturalization is high, the volume of remittances sent back decreases (due to the relocation of migrant families), while the received ones, on the contrary, start growing amid

the sale of assets in their homeland. Using data from the World Bank, the UN and central (national) banks, the research determines quantitative conditions for the transition from one stage to another based on the concentration of migration flows from the donor country and the share of migrants from specific donor country to the total number of migrants living in the recipient country. Additional findings show that in some cases, when migrants do not intend to live permanently in the recipient country, the volumes of the sent remittances continue to grow even amid very high concentration of migration flows.

1. Introduction

At the beginning of the 21st century, migration has become one of the most pervasive manifestations of globalization. The number of migrants has more than tripled in the last 50 years: currently, about 295 million people live in a country other than their country of birth (World Bank 2023), representing about 3.7% of the world's population. Rising migration is one of the main reasons for the increase in international (personal) remittances; the latter reached $794 billion in 2022 (World Bank 2022).

Remittances, in turn, have been historically an important source of support for the donor countries (Chepel and Bondarenko 2015). Throughout the last two years they have become the most important source of external financing for low- and middle-income economies (most of which are migrant-sending countries), surpassing foreign direct investment, official development assistance and portfolio investment flows (World Bank 2022). Eleven out of the seventeen Sustainable Development Goals (SDGs) of the United Nations (UN)[1] highlight the importance of international mobility and international remittances, while the World Bank Group considers them as vital tools for achieving strategic priorities for global development (World Bank 2023; Mosler and Laczko 2022).

Under these circumstances, there is rising attention of academic community to study the determinants of bilateral international remittances. However, most research in this area focuses either on micro data (i.e. based on surveys of migrants and/or households) or on country-level data, where the studies do not address micro-level factors (Beine, Lodigiani and Vermeulen 2012).

The modelling of bilateral remittances in this study is based on aggregate country data, yet it takes into account micro-level proxies, in particular migrants' preferences for leaving for a particular country (the latter characterizes their behavior and to some extent predetermines the stages of migration). Such approach allows us to enhance existing approaches for econometric modelling of remittances by more accurately assessing the specificities of bilateral personal remittance flows in the medium and long run. As such, this will contribute to the theory of migration.

[1] Including: SDG 1 (No poverty), SDG 2 (Zero hunger), SDG 3 (Good health and well-being), SDG 4 (Quality education), SDG 5 (Gender equality), SDG 8 (Decent work and economic growth), SDG 10 (Reduced inequality), SDG 11 (Sustainable cities and communities), SDG 13 (Climate action), SDG 16 (Peace, justice and strong institutions), and SDG 17 (Partnership for the Goals).

2. Stages of International Migration and Remittances

The dynamics of bilateral international remittances is a complex phenomenon that, in addition to the number of migrants abroad, is influenced by both country-level factors of the donor and recipient countries, including demographic, macroeconomic, political, environmental, geographical and other conditions (Bondarenko 2020a; Makhlouf and Kasmaoui 2018; Ratha and Shaw 2007), and micro-level factors such as the migrant's age and gender (Kock and Sun 2011), marital status, occupation and level of education (Buch et al. 2002; Ameudo-Dorantes and Pozo 2003). However, the existing literature only partially addresses the subject of this study. It is important to understand the economic behavior and social position of migrants (and their households) at different stages of the migration cycle, as well as the psychological, economic and social hurdles they have to overcome in order to eventually adapt to society and move from labour migrant to settled immigrant (Mukomel 2011; Bondarenko 2020a).

The answers to these questions lie in the study of migration stages, which are key to predicting changes in migrants' behavioural attitudes over time and under the influence of external and internal factors (Pukhova et al. 2013; Bhugra and Becker 2005; Bernard, Bell and Charles-Edwards 2014; Zaslavskaya and Rybakovsky 1987). The analysis of these stages allows us to establish a characteristic model of adaptation of a typical migrant during the migration cycle, based on the analysis of migration processes "from the inside," and to determine their behaviour.

The theory of migration stages has been described in a number of studies, where the analyses were based on quantitative and qualitative indicators of migrants' adaptation process to life in the recipient country (Toth-Bos, Wisse and Farago 2019; Bernardo et al. 2018; Zimmermann et al. 2017; Zhou 2014; Yehuda-Sternfeld and Mirsky 2014; Carrasco 2010; Yoon and Lee 2010; King et al. 2006; Zaslavskaya and Rybakovsky 1987 and others) or regression modelling of migration decisions (De Jong 2000; Nivalainen 2004). Taking into account the studies of T. Zaslavskaya and L. Rybakovsky (1987) and Toth-Bos, Wiss and Farago (2019), we distinguish three stages of the migration cycle between two countries—a sending country and a migrant-receiving country (Table 1, p. 47)—in the so-called "international migration cycle." The stages of the international migration cycle are determined by migrants' behavioral preferences as to where best to go in order to maximize the efficiency of migration and minimize the risks.

Indicators of behavioral preferences are, in turn, (i) the country concentration of migration flows from the donor country (i.e. how many migrants went to a particular receiving country relative to the total number of those who left the country) and (ii) the share of the donor country's migrant diaspora relative to the total population of the receiving country. At the same time, the financial behavior of migrants changes significantly throughout the international migration cycle.

The international migration cycle begins when families decide to migrate internationally, and then migrants go abroad and establish (initially chaotically) the first communities in the new country (the receiving country). Migrants begin to arrive in the new country, establishing the first communities there and increasing the size of the migrant diaspora. The first stage usually involves some preparatory costs, and migrant

families contribute their savings to the migrant's move abroad (to cover transport and rental costs, at least initially). During this period, migration flows between the two countries are still developing and only a small number of migrants begin to leave their home country for the recipient country. However, despite the fact that the total income of the migrant diaspora abroad is not yet very high (due to the small number of migrants and their relatively low income levels), as the size of the migrant diaspora in the recipient country grows, the volume of international remittances sent by migrants and the volume of remittances received by migrants from their families as support increases.

In the second stage of international migration, when migrants choose a country to migrate to for some reason (social, cultural, economic, political, etc.), there is a shift in the priorities of choice towards a particular receiving country (i.e. a significant proportion of migrants go to that receiving country). During this period, there is a positive correlation between the time spent in the recipient country and the amount of remittances sent (Massey and Basem 1992; Díaz-Briquets and Pérez-López 1997; Brown 1997). A significant increase in the volume of remittances sent occurs, on the one hand, in the context of an increase in the number of migrants and the corresponding expansion of the migrant diaspora (quantitative factor) and, on the other hand, in the context of an increase in the income of each individual migrant due to improved adaptability, professional skills, education, etc. (qualitative factor). Given that the main reasons for migration are economic and that in most cases the family remains in the home country, migrants continue to support their relatives at this stage. At the same time, the volume of remittances received decreases or stagnates, as migrants are already able to provide for themselves abroad.

In the third stage of international migration, there is a high degree of "naturalization" of migrants within the recipient country, and migrants try to move their families, expand their migration networks and occupy a certain position in the host society (Bondarenko and Kharitonova 2023). This means that the migrant community in the new country has not only had time to adapt to the new life, but also to settle down, take root and to some extent integrate into local socio-economic processes. Meanwhile, the financial behavior of migrants (in the absence of significant social barriers) is characterized by a shift in their behavior towards intentions to stay permanently in the recipient country. As a result, migrants form a certain social stratum within the host population, the degree of their naturalization becomes very high, and their numbers become relatively stable.

Thus, the beginning of the third stage can be indicated by (i) the declining share of the migrant diaspora in the total population of the receiving country and (ii) the fact that the receiving country remains a major destination for migrants. At this point, for migrants who decide to stay abroad, migration is no longer a temporary phenomenon (such as labor migration) but a permanent one—a process of deeper assimilation of migrants takes place (Holst and Schrooten 2006).

In the third stage, the volume of remittances to the home country decreases. Any further motives for migrants to help remaining family members—parents or relatives—are in most cases based solely on altruistic motives or a sense of internal duty (Grigoryev et al. 2008). In addition, migrants begin to sell property and assets they have inherited and/or own in their home country (Morrow-Jones 1988; Analytical Centre 2016) in order

to buy property in the recipient country and stay there permanently. As a result, the decline in remittances received by migrants in the recipient country from their family in the donor country to support the migrant abroad, characteristic of the second stage, is partially (or in some cases fully) mitigated by an increase in remittances realised from the sale of assets.

This allows us to identify three key stages in the cash transfer cycle, each of which corresponds to a stage in the international migration cycle (Table 1, p. 47).

Table 1. Stages of migration processes and the cash transfer cycle

"The three stages of the migration process" (T. Zaslavskaya, L. Rybakovsky 1987)	**Migration stages depending on the purpose of migration (Toth-Bos, Wisse and Farago 2019)**	**The international migration cycle (two-way flows at the country level)**	**Bilateral remittances cycle (two-way flows at the country level)**
1. making the decision to migrate	1. pre-migration stage	1. decision to migrate, migration and formation of the first community in the recipient country	1. increase in remittances sent home and increase in remittances received by migrants (as temporary support)
2. migration	2. during migration stage	2. the recipient country becomes a *key destination* for migrants, the migrant diaspora continues to grow	2. increase in remittances sent home and decrease/stagnation in remittances received by migrants
3. adaptation / adaptability		3. high degree of naturalization among migrants, as evidenced by: (i) the recipient country remaining a key destination for migrants and (ii) the high proportion of the migrant diaspora in relation to the total population of the recipient country	3. decrease in net remittances against a background of (i) a fall in the amount of cash sent home and (ii) an increase in remittances received due to asset sales (as a result), which partially (or fully) offsets the decline in remittances received in the previous phase
	3. post-migration stage / repatriation		

Source: Compiled by the author; Zaslavskaya, Rybakovsky (1987); Toth-Bos, Wisse and Farago (2019).

A cross-country econometric analysis was conducted to test the above conclusions about the existence of three stages of the international migration cycle and three stages of the cash transfer cycle.

3. Research Method and Data

The modelling of remittances flows is carried out using a multivariate regression model based on panel data: index *i* represents the number of each observed recipient-donor country pair (e.g. Germany-Turkey in the case of Turks migrating to Germany or Russia-Belarus in the context of migration flows from Belarus to Russia), *t* is time expressed in years. The control variables are defined according to the literature review conducted (Makhlouf and Kasmaoui 2018; Ratha and Shaw 2007; Lueth and Ruiz-Arranz 2007; Schiopu and Siegfried 2006; Alper and Neyapti 2006; and Chami et al. 2003). The theoretical model of sent remittances (1) from the migrant recipient country is summarised as follows:

(1) $LSent_{it} = \beta_0 + \beta_1 lmstock_{it} + \beta_2 RecGrowth_{it} + \beta_3 DonGrowth_{it} + \beta_4 diffGDP_{it} + \beta_5 gini_{it} + \beta_6 lfx_{it} + \beta_7 ltrade_{it} + \beta_8 ldist_{it} + \beta_9 colony_{it} + \beta_{10} comlang_{it} + \beta_{11} RecCrisis_{it} + \beta_{12} DonCrisis_{it} + \varepsilon_{it}$

In model (1), the dependent variable — $LSent_{it}$ — is the logarithm of remittances sent from the migrant-recipient country to the migrant-donor country.

The remaining variables are independent variables, including: $lmstock_{it}$ — logarithm of the variable "number of migrants from the donor country living in the recipient country," $RecGrowth_{it}$ — real GDP growth of the migrant recipient country, $Dongrowth_{it}$ – real GDP growth of the migrant donor country, $diffGDP_{it}$ — the logarithm of the difference between GDP per capita at PPP of the recipient country and the migrant donor country, $gini_{it}$ — Gini coefficient of the migrant recipient country (standardised), lfx_{it} — logarithm of the cross rate of the currencies of the two countries (calculated through the cross rate to the US dollar), $ltrade_{it}$ — logarithm of bilateral trade volume of the two countries, $ldist_{it}$ — the logarithm of the distance between the key cities or agglomerations of the two countries, $colony_{it}$ — dummy variable, reflects the presence (1) or absence (0) of colonial ties between the two countries, $comlang_{it}$ — dummy variable, reflects the presence (1) or absence (0) of a single official language in both countries, $RecCrisis_{it}$ and $DonCrisis_{it}$ — dummy variables, reflect the years of GDP decline (1) of the recipient country and the migrant donor country, respectively, for other years – (0).

The model deliberately does not include the key interest rate of donor and recipient countries, due to the statistical peculiarities of calculating this indicator.[2] Also, we do not include inflation because of its high correlation with the exchange rate. A similar approach is followed in a number of other research papers – for example, in the ECB study by Shiopu and Siegfried (2006).

Modelling of the volumes of received remittances is carried out similarly to the approach described above in model (1). In generalized form, the theoretical model of received remittances (2) in the recipient country from the donor country is presented in the following form:

(2) $LReceived_{it} = \beta_0 + \beta_1 lmstock_{it} + \beta_2 RecGrowth_{it} + \beta_3 DonGrowth_{it} + \beta_4 diffGDP_{it} + \beta_5 gini_{it} + \beta_6 lfx_{it} + \beta_7 ltrade_{it} + \beta_8 ldist_{it} + \beta_9 colony_{it} + \beta_{10} comlang_{it} + \beta_{11} RecCrisis_{it} + \beta_{12} DonCrisis_{it} + \varepsilon_{it}$

In model (2), the dependent variable — $LReceived_{it}$ — is the logarithm of remittances received by the migrant-recipient country from the migrant-donor country.

[2] Key rates changed significantly after the transition to the Jamaican monetary system and then underwent significant changes as countries merged into regional groupings or, conversely, as one country split into two or more independent states, or as the currency moved from a floating to a fixed exchange rate or vice versa. Therefore, in the context of analyzing a large number of countries of the world in the long run, a significant rate increase/decrease is not always an indicator of the business cycle in the economy. In addition, in most countries of the world, key interest rate statistics are available only from the 1990s onwards, which limits the sample.

Migration stage variables

For the research issue, we examine migration stages, which we define based on (i) the proportion of migrants who left the donor country for a migrant-recipient country of the total number of migrants who left (variable $shareleav_{it}$) and (ii) the proportion of migrants from the donor country to the total population of the recipient country (variable mig_pop_{it}). Both of these variables help determine the significance of the recipient country to migration from the donor country compared to the other countries. In order to test the assumption of non-linear nature of the relationship between the volumes of remittances sent at different stages of migration, we also test the following variables: $shareleav2_{it}$, $shareleav3_{it}$ – square and cube of the variable $shareleav_{it}$, respectively, as well as mig_pop2_{it} and mig_pop3_{it} – respectively the square and cube of the variable mig_pop_{it}.

Considering the above six variables, we augment model (1) and obtain the following form of the sent cash transfer model (3):

(3) $$LSent_{it} = \beta_0 + \beta_1 lmstock_{it} + \beta_2 RecGrowth_{it} + \beta_3 DonGrowth_{it} + \beta_4 diffGDP_{it} + \beta_5 gini_{it} + \beta_6 lfx_{it} + \beta_7 ltrade_{it} + \beta_8 ldist_{it} + \beta_9 colony_{it} + \beta_{10} comlang_{it} + \beta_{11} RecCrisis_{it} + \beta_{12} DonCrisis_{it} + \beta_{13} shareleav_{it} + \beta_{14} shareleav2_{it} + \beta_{15} shareleav3_{it} + \beta_{16} mig\_pop_{it} + \beta_{17} mig\_pop2_{it} + \beta_{18} mig\_pop3_{it} + \varepsilon_{it}$$

In turn, complementing model (2), the model of received cash remittances (4) will look as follows:

(4) $$LReceived_{it} = \beta_0 + \beta_1 lmstock_{it} + \beta_2 RecGrowth_{it} + \beta_3 DonGrowth_{it} + \beta_4 diffGDP_{it} + \beta_5 gini_{it} + \beta_6 lfx_{it} + \beta_7 ltrade_{it} + \beta_8 ldist_{it} + \beta_9 colony_{it} + \beta_{10} comlang_{it} + \beta_{11} RecCrisis_{it} + \beta_{12} DonCrisis_{it} + \beta_{13} shareleav_{it} + \beta_{14} shareleav2_{it} + \beta_{15} shareleav3_{it} + \beta_{16} mig\_pop_{it} + \beta_{17} mig\_pop2_{it} + \beta_{18} mig\_pop3_{it} + \varepsilon_{it}$$

The study uses data from the World Bank, UN, IMF, and Mayer and Zignago (2011). There is no single database on annual flows of bilateral remittances in the long run, so we used the approach of Schiopu and Siegfried (2006), who examined statistics on bilateral remittances in European countries and used data from central (national) banks as a reference. In the present study, we searched the websites of 115 central (national) banks around the world for data on bilateral remittances (secondary income debit and credit of the current account balance of payments or remittances) and found relevant statistics over the long term in Austria, the UK, Germany, the Netherlands, Russia, and the US.[3]

Despite the constraints mentioned above, the present sample fulfils the objectives of this study.

[3] National Bank of Austria (Oesterreichische Nationalbank): indicator — debit and credit of the secondary income balance of the current account of the balance of payments; Bank of England: indicator — debit and credit of the secondary income balance of the current account of the balance of payments; German Federal Bank (Deutsche Bundesbank): indicator — debit and credit of the balance of secondary income of the current account of the balance of payments; Netherlands Bank (De Nederlandsche Bank): indicator — debit and credit of the balance of secondary income of the current account of the balance of payments; Bank of Russia: indicator — cross-border transfers of individuals (residents and non-residents); Bureau of Economic Analysis: indicator — international transactions (secondary account).

We use data for 221 donor and 218 recipient countries between 1972 and 2021; however, years do vary across individual bilateral flows and not all country pairs data is available. The total count of all bilateral cash transfer flows is 596 (see Appendix 1). Brief descriptive statistics of the variables are summarized below (see Table 2, p. 50); both the raw values of the variables (without logarithm and without squaring or cube) and the variables used in the model are presented here.

Table 2. Descriptive statistics of variables

Variable	Brief description*	Total	Cf. value	St. off.	Min. value	Max. value
sent	Sent remittances from RC to DC, $mln	12,269	398	1 246	0	17,332
lsent	*sent* logarithm	11,542	2.9	3.2	-7.6	9.8
received	Received remittances to RC from DC, $mln	12,123	387	1 233	0	17,332
lreceived	*received* logarithm	11,406	2.9	3.2	-7.6	9.8
mstock	number of migrants to the RC from the DC, people	29,800	75,098	441,186	0	1.20E+07
lmstock	*mstock* logarithm	17,897	7.7	3.8	0.0	16.3
RecGrowth	Economic growth RC, %	26,672	2.7	5.2	-64.0	150.0
DonGrowth	Economic growth DC, %	26,688	2.7	5.2	-64.0	150.0
diffGDP	Difference in GDP per capita at PPPs of RC and DC, thousand international dollars	17,132	0.0	18.8	-145.4	145.4
gini_std	Gini coefficient RC	10,685	37.2	8.0	15.0	75.0
fx	Cross currency exchange rate of DC and RC	27,320	3.90E+08	1.11E+10	0.0**	6.35E+11
lfx	*fx* logarithm	27,320	0.0	3.9	-27.2	27.2
trade	Bilateral trade volume of RC and DC (exports + imports), $mln	16,284	15,714	48,868	0.0**	664,642
ltrade	*trade* logarithm	16,284	6.9	3.3	-9.8	13.4
dist	Distance between countries, km	29,000	6,123	4,283	60	16,774
ldist	*ldist* logarithm	29,000	8.3	1.0	4.1	9.7
colony	There are colonial ties (1)	29,000	0.08	0.27	0	1
comlang	There is a common language of communication (1)	29,000	0.06	0.23	0	1
RecCrisis	Year of GDP decline (1) RC	29,800	0.17	0.37	0	1
DonCrisis	Year of GDP decline (1) DC	29,800	0.17	0.37	0	1
shareleav	share of migrants who left DC for RC, %	28,923	3.35	10.90	0	98.3
shareleav2	*shareleav*	28,923	130.1	671.8	0	9,656.4
shareleav3	*shareleav* cube	28,923	7,199.1	50,669.4	0	948,899.3
mig_pop	share of migrants from DC to the total RC population, %	29,000	0.3	1.3	0.0	21.7

Variable	Brief description*	Total	Cf. value	St. off.	Min. value	Max. value
mig_pop2	*mig_pop* square	29,000	1.7	16.5	0.0	469.7
mig_pop3	*mig_pop* cube	29,000	19.9	262.1	0.0	10,181.1

Note: *RC - recipient country, DC - donor country, **number lower than 0.0001

Source: Author's calculations using the STATA14 package

The dataset is an unbalanced panel, i.e. many country pairs do not have statistics for all periods—this is due to the statistical characteristics of the data. In this paper, the dataset is presented in a wide panel format, where the number of time periods (t) is far smaller than the number of observation units *(i)*, i.e. *i>t* (the number of country pairs is more than 430, periods range from two to 60 years).

Multicollinearity is technical: high correlation is characteristic of the variables $shareleav_{it}$ and its derivatives, as well as for the variable mig_pop_{it} and its derivatives (Table 2, p. 50).

4. Econometric Modelling

In the first stage of the study, end-to-end regressions (ordinary least squares method, OLS), fixed-effect (FE) panel regressions and random-effect (RE) panel regressions were constructed for models (1), (2), (3) and (4) and tests were performed.

For all models in the Breusch-Pagan test, p-level<0.01, so the main hypothesis is dismissed. Thus, random-effects regression describes our data better than end-to-end regression. The Wald and Hausman tests showed that the fixed-effect regression is more preferable, which is expected since specific country pairs were chosen for the study and their composition did not change year to year. However, there are three fixed variables in the regression that do not vary over time, $ldist_{it}$, $colony_{it}$ and $comlang_{it}$ which were eliminated from the fixed-effect regression. Therefore, due to the invariance of dummy variables, here and further we consider both fixed and random effects regressions (because, unlike fixed-effects regression, the latter allows us to estimate coefficients with time-invariant variables). As for stationarity testing, it is not required in this paper as we use panel data in a wide format, and in the context of panel data, the stationarity problem is specific to long panel datasets when the number of time periods (t) is greater than the number of observation units (i), i.e. t>i (Wooldridge 2015). See Table 3 (p. 51) and Table 4 (p. 53) for the modelling results.

Table 3. Modelling results: volumes of sent remittances

	[1a] fe lsent	[1b] re lsent	[1c] re lsent	[3a] re lsent	[3b] re lsent	[3c] re lsent	[3d] fe Lsent
lmstock	0.149***	0.173***	0.160***	0.152***	0.136***	0.120***	0.111***
	(0.0124)	*(0.0116)*	*(0.0119)*	*(0.0127)*	*(0.0131)*	*(0.0134)*	*(0.0139)*
RecGrowth	-0.00620	-0.00694	-0.00839*	-0.00872*	-0.00906*	-0.00904*	-0.00706

	[1a] fe lsent	[1b] re lsent	[1c] re lsent	[3a] re lsent	[3b] re lsent	[3c] re lsent	[3d] fe Lsent
	(0.00499)	*(0.00496)*	*(0.00497)*	*(0.00498)*	*(0.00497)*	*(0.00495)*	*(0.00498)*
DonGrowth	-0.0262***	-0.0247***	-0.0250***	-0.0252***	-0.0258***	-0.0262***	-0.0273***
	(0.00405)	*(0.00403)*	*(0.00402)*	*(0.00403)*	*(0.00403)*	*(0.00401)*	*(0.00403)*
diffGDP	-0.00693***	-0.00317*	-0.00274	-0.00287	-0.00314*	-0.00375**	-0.00766***
	(0.00227)	*(0.00194)*	*(0.00194)*	*(0.00194)*	*(0.00194)*	*(0.00193)*	*(0.00226)*
gini	0.0367***	0.0197***	0.0235***	0.0225***	0.0224***	0.0236***	0.0381***
	(0.00617)	*(0.00522)*	*(0.00541)*	*(0.00541)*	*(0.00540)*	*(0.00539)*	*(0.00614)*
lfx	-0.0134*	-0.0205***	-0.0208***	-0.0200***	-0.0212***	-0.0202***	-0.0135*
	(0.00753)	*(0.00732)*	*(0.00730)*	*(0.00732)*	*(0.00730)*	*(0.00728)*	*(0.00750)*
ltrade	0.688***	0.678***	0.670***	0.675***	0.673***	0.673***	0.685***
	(0.0173)	*(0.0146)*	*(0.0150)*	*(0.0151)*	*(0.0151)*	*(0.0150)*	*(0.0174)*
RecCrisis	-0.0618	-0.0620	-0.0667*	-0.0682*	-0.0694*	-0.0722*	-0.0655
	(0.0410)	*(0.0411)*	*(0.0410)*	*(0.0411)*	*(0.0411)*	*(0.0409)*	*(0.0409)*
DonCrisis	-0.0406	-0.0403	-0.0453	-0.0495	-0.0545	-0.0530	-0.0489
	(0.0405)	*(0.0406)*	*(0.0406)*	*(0.0407)*	*(0.0406)*	*(0.0404)*	*(0.0404)*
ldist			-0.133*	-0.140*	-0.126*	-0.115	0
			(0.0757)	*(0.0749)*	*(0.0751)*	*(0.0753)*	*(.)*
colony			0.831***	0.796***	0.743***	0.776***	0
			(0.262)	*(0.264)*	*(0.265)*	*(0.265)*	*(.)*
comlang			0.658**	0.656**	0.617**	0.486*	0
			(0.293)	*(0.289)*	*(0.290)*	*(0.291)*	*(.)*
shareleav				0.00668**	0.0250***	0.0446***	0.0397***
				(0.00286)	*(0.00632)*	*(0.0105)*	*(0.0115)*
shareleav2					-0.000338***	-0.00134***	-0.00133***
					(0.0000908)	*(0.000375)*	*(0.000421)*
shareleav3						0.00000997***	0.00000993**
						(0.00000361)	*(0.00000418)*
mig_pop				-0.0315	0.176***	0.653***	0.737***
				(0.0322)	*(0.0707)*	*(0.110)*	*(0.118)*
mig_pop2					-0.0183***	-0.141***	-0.154***
					(0.00548)	*(0.0221)*	*(0.0229)*
mig_pop3						0.00696***	0.00747***
						(0.00121)	*(0.00124)*
cons	-4.083***	-3.688***	-2.709***	-2.630***	-2.651***	-2.709***	-3.959***
	(0.229)	*(0.220)*	*(0.640)*	*(0.634)*	*(0.635)*	*(0.636)*	*(0.229)*
N – number of observations *(country pairs and periods)*	4868	4868	4863	4852	4852	4852	4852

	[1a] fe lsent	[1b] re lsent	[1c] re lsent	[3a] re lsent	[3b] re lsent	[3c] re lsent	[3d] fe Lsent
i - number of observations *(country pairs)*	441	441	440	436	436	436	436
R2 within	0.382	0.381	0.382	0.382	0.385	0.391	0.392
R2 overall	0.645	0.671	0.689	0.693	0.691	0.689	0.650
R2 between	0.701	0.720	0.733	0.740	0.739	0.738	0.707

Note. Standard errors are indicated in brackets. Dependent variable is $lsent_{it}$. ***/**/* - significance of coefficient estimates at 1%/5%/10% levels, respectively. (.) - eliminated (excluded) variables in fixed-effect regression

Source: Author's calculations using the STATA14 package

Regressions with fixed [1a] and random effects [1b] reflect model (1) without accounting for invariant variables, while regression [1c] is a panel regression with random effects that accounts for the $ldist_{it}$, $colony_{it}$ and $comlang_{it}$. Regressions [3a], [3b], [3c] are panel regressions with random effects of model (3), regression [3d] is a panel regression with fixed effects of model (3)—here the invariant variables have been excluded from the model.

Table 4. Modelling results: volumes of remittances received

	[2a] fe lreceived	[2b] re lreceived	[2c] re lreceived	[4a] re lreceived	[4b] re lreceived	[4c] re lreceived	[4d] fe lreceived
lmstock	0.128***	0.139***	0.125***	0.155***	0.137***	0.128***	0.127***
	(0.0130)	*(0.0120)*	*(0.0123)*	*(0.0131)*	*(0.0135)*	*(0.0138)*	*(0.0145)*
RecGrowth	-0.0179***	-0.0178***	-0.0193***	-0.0177***	-0.0180***	-0.0180***	-0.0168***
	(0.00521)	*(0.00518)*	*(0.00519)*	*(0.00518)*	*(0.00516)*	*(0.00516)*	*(0.00518)*
DonGrowth	-0.0179***	-0.0211***	-0.0215***	-0.0215***	-0.0224***	-0.0226***	-0.0193***
	(0.00419)	*(0.00417)*	*(0.00417)*	*(0.00415)*	*(0.00415)*	*(0.00415)*	*(0.00417)*
diffGDP	-0.00141	-0.00582***	-0.00555***	-0.00582***	-0.00605***	-0.00641***	-0.00219
	(0.00239)	*(0.00200)*	*(0.00200)*	*(0.00199)*	*(0.00198)*	*(0.00198)*	*(0.00238)*
gini	0.0375***	0.0316***	0.0359***	0.0356***	0.0353***	0.0357***	0.0376***
	(0.00640)	*(0.00532)*	*(0.00553)*	*(0.00551)*	*(0.00549)*	*(0.00549)*	*(0.00637)*
lfx	0.0136*	0.0163**	0.0163**	0.0136*	0.0117	0.0121	0.00929
	(0.00814)	*(0.00786)*	*(0.00784)*	*(0.00782)*	*(0.00780)*	*(0.00780)*	*(0.00810)*
ltrade	0.770***	0.731***	0.721***	0.712***	0.709***	0.708***	0.751***
	(0.0182)	*(0.0150)*	*(0.0153)*	*(0.0154)*	*(0.0153)*	*(0.0153)*	*(0.0182)*
RecCrisis	-0.114***	-0.125***	-0.130***	-0.123***	-0.125***	-0.127***	-0.113***
	(0.0433)	*(0.0434)*	*(0.0435)*	*(0.0433)*	*(0.0433)*	*(0.0432)*	*(0.0431)*
DonCrisis	-0.0302	-0.0469	-0.0516	-0.0438	-0.0496	-0.0486	-0.0289
	(0.0423)	*(0.0424)*	*(0.0424)*	*(0.0423)*	*(0.0422)*	*(0.0422)*	*(0.0420)*

	[2a] fe lreceived	[2b] re lreceived	[2c] re lreceived	[4a] re lreceived	[4b] re lreceived	[4c] re lreceived	[4d] fe lreceived
ldist			-0.143**	-0.137*	-0.123*	-0.118*	0
			(0.0734)	*(0.0725)*	*(0.0723)*	*(0.0722)*	*(.)*
colony			0.862***	1.137***	1.080***	1.096***	0
			(0.256)	*(0.258)*	*(0.258)*	*(0.258)*	*(.)*
comlang			0.545*	0.592**	0.549**	0.479*	0
			(0.287)	*(0.283)*	*(0.282)*	*(0.282)*	*(.)*
shareleav				-0.0195***	0.00652	0.0199*	0.0264**
				(0.00292)	*(0.00657)*	*(0.0109)*	*(0.0121)*
shareleav2					-0.000455***	-0.00110***	-0.00123***
					(0.0000944)	*(0.000381)*	*(0.000434)*
shareleav3						0.00000632*	0.00000700*
						(0.00000363)	*(0.00000430)*
mig_pop				-0.0132	0.180***	0.418***	0.308***
				(0.0330)	*(0.0727)*	*(0.114)*	*(0.125)*
mig_pop2					-0.0171***	-0.0787***	-0.0633***
					(0.00568)	*(0.0231)*	*(0.0241)*
mig_pop3						0.00348***	0.00288**
						(0.00126)	*(0.00130)*
cons	-4.792***	-4.116***	-3.056***	-3.206***	-3.204***	-3.221***	-4.641***
	(0.239)	*(0.224)*	*(0.621)*	*(0.615)*	*(0.613)*	*(0.611)*	*(0.239)*
N – number of observations *(country pairs and periods)*	4784	4784	4779	4767	4767	4767	4767
i - number of observations *(country pairs)*	437	437	436	432	432	432	432
R2 within	0.402	0.401	0.402	0.407	0.412	0.413	0.414
R2 overall	0.625	0.634	0.666	0.672	0.670	0.671	0.627
R2 between	0.715	0.724	0.743	0.748	0.747	0.748	0.715

Note. Standard errors are indicated in parentheses. Dependent variable is $lreceived_{it}$. ***/**/* - significance of coefficient estimates at 1%/5%/10% levels, respectively. (.) - eliminated (excluded) variables in fixed-effect regression

Source: Author's calculations using the STATA14 package

Regressions with fixed [2a] and random effects [2b] reflect model (2) without accounting for invariant variables, while regression [2c] is a panel regression with random effects accounting for $ldist_{it}$, $colony_{it}$ and $comlang_{it}$. Regressions [4a], [4b],

[4c] are panel regressions with random effects of model (4), regression [4d] is a panel regression with fixed effects of model (4)—here invariant variables were excluded from the model.

All coefficients before explanatory variables in the regression equations above are in line with expectations.

5. Regression Analysis Results Interpretation

Share of migrants who left the donor country in favor of the recipient country

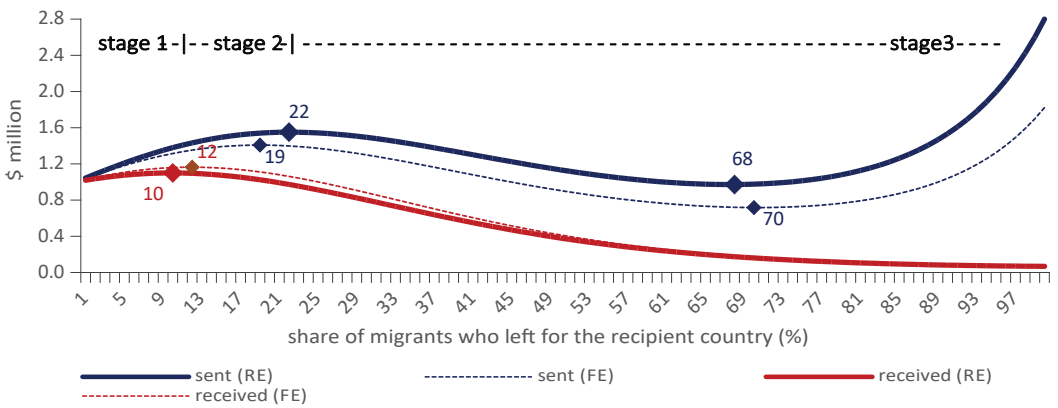

Figure 1. Modelling of bilateral flows of international remittances ($ million) depending on the share of migrants who left the donor country in favor of the recipient country (%)

Note. The diamonds indicate function extrema. The maximum value of the share of migrants who left for the recipient country is 98.3%.

Source: author's calculations.

To identify the stages of the bilateral migration cycle, we plotted remittances against the variable $shareleav_{it}$ and its derivatives ($shareleav2_{it}$ and $shareleav3_{it}$) using the data from the above regression analysis and calculated[4] the extrema of functions [3c], [3d], [4c], [4d], which will allow us to determine the conditions of transition from one stage of bilateral migration to another. The functions reflect the dependence of the volumes of sent remittances ($LSent_{it}$) to the share of migrants who left the recipient country ($shareleav_{it}$).

In turn, transition from the second to the third stage occurs when the share of migrants leaving for a particular recipient country starts to exceed 19-22%. The third

[4] The equations are constructed with other things being equal, ceteris paribus. Since both dependent variables $LSent_{it}$ and $LReceived_{it}$ are natural logarithms of the original variables $Sent_{it}$ and $Received_{it}$, for graphical interpretation all four functions were respectively transformed through the inverse exponential function e^x. The range of acceptable values of the variable $shareleav_{it}$ is from 0 (migrants did not go to the recipient country) to 100 (all migrants from the donor country go to the recipient country).

stage of the bilateral migration cycle, however, has a more complex structure than we previously assumed. From the beginning of the third stage, there is indeed a decline in outward remittances to the donor country from the recipient country, while the decline in outward remittances slows down (probably due to capital flows in the form of asset sales). However, in country pairs with a very high country concentration of migration (i.e., where more than 68-70% of the total number of migrants leave for a particular recipient country[5]), further migration intensification leads to an increase in sent remittances (Figure 1, p. 55). We attribute this to cases where mass migration from the donor country to the recipient country is a consequence of well-established channels for temporary employment abroad and the inability (or unwillingness for a variety of reasons) of migrants to change their place of residence.[6]

Proportion of migrants from the donor country in relation to the total population of the recipient country

In order to identify the stages of the bilateral migration cycle, similarly to the approach described above, we plotted remittances against the variable mig_pop_{it} and its derivatives mig_pop2_{it} and mig_pop3_{it} using data from the above regression analysis and calculated[7] the extrema of functions [3c], [3d], [4c], [4d], which will allow us to determine the conditions of transition from one stage of bilateral migration to another. Equations were also constructed, all other things being equal, ceteris paribus, based on the calculated coefficients of the equations (Table 3, p. 51, Table 4, p. 53).

The analysis revealed that during the first and second phases, the share of migrants who reside in the recipient country among its total population does not exceed 3-3.4% (Figure 2, p. 57).

During this period, the volume of sent remittances grows (migrants send money home), while the volume of received remittances grows initially at a high rate (the first stage of migration, the family supports the migrant at first) and then virtually does not grow (the second stage of migration).

Then, as the share of the migrant population in the recipient country increases, there is a transition to the third stage. Here the volume of remittances sent begins to decrease. Received remittances also decrease at first, but their rate of decrease is significantly lower

[5] This is, for example, fundamentally characteristic of migration from Mexico to the United States, and from Kyrgyzstan, Tajikistan and Turkmenistan to Russia. This situation was also observed for the migration of Turks to Germany in the 1980s.

[6] This may also be related to the growth of entrepreneurial activity of migrants at home, i.e. when transfers start to have an investment character rather than being aimed at supporting the welfare of relatives, but this character of transfers is usually reflected not in the current but in the capital account of the country's balance of payments and is not the subject of this study.

[7] Since both dependent variables $LSent_{it}$ и $LReceived_{it}$ are natural logarithms of the original variables $Sent_{it}$ и $Received_{it}$, For graphical interpretation, all four functions were respectively transformed through an inverse exponential function e^x. The range of permissible values of the variable mig_pop_{it} is from 0 (migrants do not live in the recipient country) to 22 (maximum share of migrants from a certain country in relation to the population of the recipient country—was typical of Russian migrants in Estonia in the 1980s and 1990s and Kazakhstan in the 1970s).

than that of sent remittances, and as a result net remittances become negative.

This also confirms the complex nature of the third stage. In countries with a very high concentration of migrants from a particular country (i.e. where the share of migrants in the population exceeds 10.5-12%[8] of the total population) further growth of the migrant diaspora leads to an increase in the volume of remittances, both sent and received (Figure 2, p. 57). The growth in the volume of received remittances is evidence of mass relocation of the population abroad. Probable reasons for the growth in the volume of sent remittances are presented in the paragraph above (for example, the growth of entrepreneurial activity and/or the impossibility or lack of desire to leave for permanent residence).

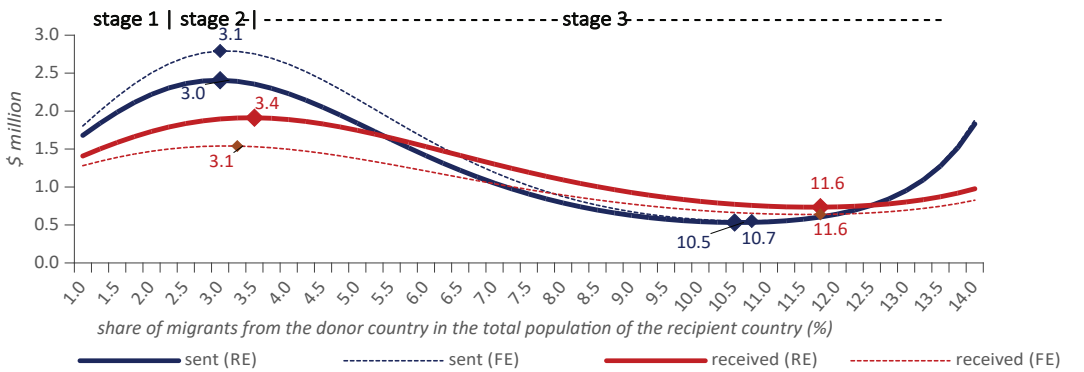

Figure 2. Modelling of bilateral international transfer flows ($ million) depending on the share of migrants from the donor country in the total population of the recipient country (%)

Note. The diamonds indicate function extrema. The maximum value of the share of migrants from the donor country in the total population of the recipient country is 21.7%

Source: author's calculations

6. Quantitative Conditions of Migration Phases and Country Examples

These calculations allow us to undestand (Table 5, p. 58) how the degree of adaptation of migrants in the recipient country (which is determined by the cycle of international migration) transforms the patterns of migrants' financial behaviour.

The estimated conditions (Table 5, p. 58) allow us to identify the stages of bilateral migration for different country pairs and the years of transition from one stage to the other. In the context of the share of migrants in the recipient country, however, the essential question of the population ratio of the two countries remains. If the countries in a country pair have roughly the same population size, the conditions of the variable mig_pop_{it} to determine the stages of migration will be representative (in the sample, the median of the ratio of the population of the donor country to

[8] This is, for example, fundamentally characteristic for migration to Russia from Kazakhstan, Estonia, Latvia, and Ukraine.

the population of the recipient country is equal to one, because for almost every country pair there is an inverse country pair: for example, for DEU/TUR—migration of Turks to Germany there is a pair TUR/DEU—migration of Germans to Turkey). If the population of the donor country significantly exceeds the population of the recipient country, the stages of the migration cycle may be shifted downwards, and upwards in the opposite case.

Total number of country pairs for which data is available ($shareleav_{it}$ and mig_pop_{it}) from 1972 to the present for a period of more than one year is 570. Based on the above conditions, 493 pairs are still in the first stage of migration (Appendix 3). As an example, we highlight the following recipient-donor pairs: Argentina-United States, Austria-Slovakia, Bulgaria-Germany, UK-India (despite the increasing share of migrants from India in the total population of the UK in recent years), etc.

Table 5. Estimated conditions of the international migration cycle and the remittance cycle

	The international migration cycle	**Cycle of bilateral cash remittances**	**Share of migrants who left for the recipient country (%)**	**Share of migrants from the donor country in the population of the recipient country (%)**
1	Making the decision to migrate, migration and the formation of the first community in the recipient country	Increase in remittances sent home and increase in cash remittances received by migrants (as temporary support)	Less 10–12%	Less 3.0–3.4%
2	The recipient country becomes a *key destination* for migrants, the migrant diaspora continues to grow	Increase in remittances sent home and decrease/stagnation in remittances received by migrants	From 10–12% up to 19–22%	
3	High degree of naturalisation of migrants, as evidenced by: (i) the recipient country remaining a key destination for migrants and (ii) a high proportion of the migrant diaspora in relation to the total population of the recipient country	A decline in net remittances as a result of (i) a fall in repatriated cash and (ii) an increase in remittances received due to the sale of assets (as a result), partially (or fully) offsetting the decline in remittances received in the previous phase.	From 19–22% and above	From 3.0–3.4% and above

Source: Compiled by the author

Transition from the first to the second stage is observed in the following recipient-donor country pairs: Austria-Czech Republic (second stage since 2010), United States-Singapore (since 2010), Germany-Switzerland (since 2000), United States-India (since 2000), Germany-Estonia (since 1990), Germany-Latvia (since 1990), Germany-Spain (since 2000), Austria-Slovenia (since 2000).

Finally, the following recipient-donor country pairs have gone through three stages of migration since: United States-China (the second stage started in the 1990s and the third in the 2010s), Mexico-United States (the second stage started in the 1990s and the third in the 2010s), Germany-Turkey (the latter went through the first two stages in the

1960s) and others.

The analysis revealed that Russia has been a third-stage recipient country with the countries of the former USSR as migrant donors (Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Lithuania, Latvia, Moldova, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan) for many years (Russia is a priority country for migration for more than 40% of people leaving these countries). At the same time, officially published trends of remittances start to show patterns of the third stage of the migration cycle only during the last ten to twenty years, and not yet for all countries—this is probably a consequence of the specifics of migration processes during the USSR period, the uncertainty in the economic situation during the 1990s, restrictions on personal remittances that were in force in the territories of many former USSR member countries in the 1990s to early 2010s, statistical subtleties and specifics of migration from individual countries. For example, the majority of migrants from Uzbekistan are typically labour migrants with the purpose of earning money to improve their financial situation (and the welfare of their family) in their home country, rather than moving to Russia for permanent residence (Bondarenko 2020a). In this case, the volume of sent remittances continues to grow even as the share of departing migrants to the recipient country increases.

7. Conclusion

This study is a continuation of a series of studies on migration cycles and the modelling of remittance flows.

Bilateral migration processes (between a donor country and a recipient country) follow a three-stage process. In the first stage, the decision to migrate is made and the first communities are established in the recipient country. In the second stage, the recipient country gradually becomes a key destination for migrants and the migrant diaspora expands. In the third stage of the migration cycle, there is a high degree of naturalization of migrants, as evidenced by the fact that the recipient country remains a key destination for migrants and the share of the migrant diaspora in the total population of the recipient country becomes high.

The dependence of remittances on the migration cycle is non-linear. To analyze the flows of remittances, econometric modelling of the volumes of (i) remittances sent from the recipient country to the donor country and (ii) remittances received by the recipient country from the donor country was carried out. A synthesis of the existing literature shows that the modelling of remittances is mainly based on country-wide statistics, but does not include microeconomic parameters. In the present study, the stages of the migration cycle are included in the models of remittances sent and received, together with the main macroeconomic parameters. The inclusion of these variables in the model provides a more accurate assessment of the specificity of financial flows between countries: in the case of both sent and received remittances, the model allowed us to identify the non-linear nature of the dependence of remittances on the migration cycle. In the third stage of migration, after a significant increase in the migrant diaspora in the recipient country (also in the context of it becoming a priority destination for migration), there is a decrease in remittances sent from the recipient country to the home

country and an increase in personal remittances in the opposite direction.

The proxies for the stages of the migration cycle — i) the share of migrants from the donor country in the total population of the recipient country and ii) the share of those leaving the donor country for a given recipient country — allow us to assess the conditions of transition from one stage to another.

In stages one and two, the share of migrants from the donor country in the total population of the recipient country is low, less than 3.0-3.4%. In the first stage, the share of those leaving the donor country for a given recipient country does not exceed 10-12%, personal remittances sent from the donor country to the recipient country increase, and remittances received also increase. In the second stage, more and more migrants decide to go to a specific destination country, and the concentration of those leaving ranges from 10-12% to 19-22%. The volume of personal remittances sent from the receiving country to the donor country continues to grow, while the volume received begins to decline or stagnate. In the third stage, the share of those leaving for a given country begins to exceed 19-22%, while at the same time the share of migrants relative to the population of the receiving country increases. In the third stage, econometric analysis suggests that the volume of personal remittances sent home by migrants actually declines.

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Appendix 1 Bilateral remittances

Donor country (below)	Recipient country											
	Russia	Germany	United States	Austria	UK	Japan	Netherlands	Switzerland	India	Brazil	China	Others
Russia		2006–2021	2006–2021	2006–2021	2006–2021	2006–2021	2006–2021	2006–2021	2006–2021	2006–2021	2006–2021	Note 5
Germany	1992–2021		1972–2021	1972–2021	1972–2007	1972–2021	1972–2021	1972–2021	1972–2021	1972–2021	1972–2021	Note 6
United States	2006–2021	1972–2012		1995–2021	1999–2021	2003–2021	2004–2021		2003–2021	2003–2021	2003–2021	Note 7
Austria	2006–2021	1972–2021	1995–2021		1995–2021		1995–2021	1995–2021				Note 8
UK	2006–2021	1972–2008	1999–2021	1995–2021		1999–2021		1999–2021	1999–2021	1999–2021	1999–2021	Note 9
Japan	2006–2021	1972–2021	2003–2021		1999–2021		2004–2021					
Netherlands	2006–2021	1972–2021	2004–2021	1995–2021		2004–2021						
Brazil	2006–2021	1972–2021	2003–2021		1999–2021							
Canada	2006–2021	1972–2013	2003–2021		1999–2021							
China	2006–2021	1972–2021	2003–2021		1999–2021							
France	2006–2021	1972–2021	2003–2021	1995–2021								
India	2006–2021	1972–2021	2003–2021		1999–2021							
Italy	2006–2021	1972–2021	2003–2021	1995–2021								
Switzerland	2006–2021	1972–2021		1995–2021	1999–2021							
Argentina	2006–2021	1972–2021	2003–2021									
Australia	2006–2021	1972–2021	2003–2021									
Belgium	2006–2021	1982–2021	2003–2021									
Croatia	2006–2021	1992–2021		1995–2021								
Hungary	2006–2021	1972–2021		1995–2021								
Luxembourg	2006–2021	1972–2021	2003–2021									
Mexico	2006–2021	1972–2021	2003–2021									
Poland	2006–2021	1972–2021		1995–2021								
Romania	2006–2021	1972–2021		1995–2021								
Singapore	2006–2021	1972–2021	2003–2021									
Slovenia	2006–2021	1992–2021		1995–2021								
Spain	2006–2021	1972–2021		1995–2021								
Others	Note 1	Note 2	Note 3	Note 4								

Notes.

[1] Cash remittances to Russia in the period 2006-2021. From the following countries: Afghanistan, Albania, Algeria, American Samoa, Andorra, Angola, Anguilla, Antigua and Barbuda, Armenia, Aruba, Azerbaijan, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bermuda, Bolivia, Bosnia and Herzegovina, Botswana, Brunei, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cayman Islands, Central African Republic, Chad, Chile, Colombia, Cook Islands, Costa Rica, Côte d'Ivoire, Croatia, Cuba, Curaçao, Cyprus, Czech Republic, Denmark, Djibouti, Dominica, Dominican Republic, DR Congo, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, French Guiana, French Polynesia, Gabon, Georgia, Ghana, Gibraltar, Greece, Greenland, Grenada, Guadeloupe, Guam, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Iceland, Indonesia, Iran, Iraq, Ireland, Isle of Man, Israel, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Martinique, Mauritania, Mauritius, Mayotte, Mexico, Micronesia, Moldova, Monaco, Mongolia, Montenegro, Montserrat, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands Antilles, New Caledonia, New Zealand, Nicaragua, Niger, Nigeria, Niue, Norfolk Island, North Korea, Northern Mariana Islands, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Puerto Rico, Qatar, Republic of the Congo, Romania, Rwanda, Saint Helena, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, South Korea, South Sudan, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Syria, Tajikistan, Tanzania, Thailand, Togo, Tokelau, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Turks and Caicos Islands, Tuvalu, Uganda, Ukraine, UAE, United Kingdom, Uruguay, United States, Uzbekistan, Vanuatu, Venezuela, Vietnam, Virgin Islands (UK), Virgin Islands (United States), Wallis and Futuna Islands, Yemen, Zambia, Zimbabwe.

[2] Cash remittances to Germany between 1972 and 2012 (unless otherwise stated) from the following countries: Bulgaria, Cyprus, Denmark, Estonia, Finland, Greece, Iceland, Ireland (1973-2018), Latvia (1992-2021), Lithuania (1992-2021), Liechtenstein (1995-2021), Malaysia, Malta, Morocco, Norway, Portugal, Sweden, Turkey;

[3] Cash remittances to the United States between 2003 and 2021 from the following countries: China, Hong Kong SAR, South Africa, South Korea, Taiwan SAR, Venezuela;

[4] Cash remittances to Austria in the period 1995-2021 from the following countries: Czech Republic and Slovakia;

[5] Cash remittances from Russia in the period 2006-2021 to the following countries: Afghanistan, Albania, Algeria, American Samoa, Andorra, Angola, Anguilla, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Cayman Islands, Central African Republic, Chad, Chile, China, Colombia, Comoros, Cook Islands, Costa Rica, Croatia, Cuba, Curaçao, Cyprus, Czech Republic, Democratic Republic of the Congo, Denmark, Djibouti, Dominica, Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Eswatini, Ethiopia, Fiji, Finland, France, French Guiana, French Polynesia, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece,

Greenland, Grenada, Guadeloupe, Guam, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong SAR, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Isle of Man, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Martinique, Mauritania, Mauritius, Mayotte, Mexico, Micronesia, Moldova, Monaco, Mongolia, Montenegro, Montserrat, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands Antilles, New Caledonia, New Zealand, Nicaragua, Niger, Nigeria, Niue, Norfolk Island, North Korea, Northern Mariana Islands, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Puerto Rico, Qatar, Republic of the Congo, Romania, Russia, Rwanda, Saint Helena, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Serbia and Montenegro, Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, South Korea, South Sudan, Spain, Sri Lanka, Sudan, Suriname, Sweden, Switzerland, Syria, Taiwan SAR, Tajikistan, Tanzania, Thailand, Togo, Tokelau, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Turks and Caicos Islands, Tuvalu, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan, Vanuatu, Vatican City, Venezuela, Vietnam, Virgin Islands (British), Virgin Islands (U.S.), Wallis and Futuna, Western Sahara, Yemen, Zambia, Zimbabwe.

[6] Cash remittances from Germany between 1972 and 2012 (unless otherwise stated) to the following countries: Argentina, Australia, Belgium (1982-2021), Bulgaria, Canada (1992-2013), Croatia, Cyprus (1992-2021), Denmark, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland (1993-2018), Italy (1992-2016, 1993-2018), Latvia (1992-2013, 1992-2001, 1992-2021), Liechtenstein (1995-2021), Lithuania (1992-2021), Luxembourg, Malaysia, Malta, Mexico, Morocco, Norway, Poland, Portugal, Romania, Singapore, Slovenia (1992-2021), Spain (1972-2016, 1992-2003, 1992-2016), Sweden, Turkey (1992-2021), United Kingdom (1993-2018);

[7] Cash remittances from the United States between 2003 and 2021 to the following countries: Argentina, Australia, Belgium, Mexico, Hong Kong SAR, Taiwan SAR, Singapore, South Africa, South Korea, Venezuela;

[8] Cash remittances from Austria in the period 1995-2021 to the following countries: Croatia, Czech Republic, France, Hungary, Italy, Poland, Romania, Slovakia, Slovenia, Spain;

[9] Cash remittances from the UK in the period 1999-2021 to the following countries: Canada, Hong Kong SAR.

Appendix 2. Correlation matrix

	lsent	lreceived	lmstock	RecGrowth	DonGrowth	diffGDP	lfx	gini	ltrade	RecCrisis	DonCrisis	ldist	colony	comlang	shareleav	shareleav2	shareleav3	mig_pop	mig_pop2	mig_pop3
lsent	1,0000																			
lreceived	0,8401*	1,0000																		
lmstock	0,7230*	0,6559*	1,0000																	
RecGrowth	-0,0738*	-0,0359*	-0,1421*	1,0000																
DonGrowth	-0,0376*	-0,0727*	0,0225*	0,1398*	1,0000															
diffGDP	0,0736*	-0,0767*	0,1594*	-0,0441*	0,0464*	1,0000														
lfx	-0,0232	0,0252*	0,1431*	-0,0926*	0,0930*	0,3083*	1,0000													
gini	-0,2150*	-0,0855*	-0,1966*	-0,0778*	-0,0003	-0,2338*	0,0362*	1,0000												
ltrade	0,8006*	0,7996*	0,6609*	-0,0352*	-0,0334*	-0,0062	0,0016	-0,3249*	1,0000											
RecCrisis	-0,0306*	-0,0362*	0,0136	-0,7062*	-0,1378*	-0,0114	0,0595*	0,2030*	-0,0590*	1,0000										
DonCrisis	-0,0371*	-0,0308*	-0,0694*	-0,1374*	-0,7047*	0,0105	-0,0597*	0,0418*	-0,0584*	0,1640*	1,0000									
ldist	-0,4020*	-0,4067*	-0,3808*	0,0345*	0,0358*	0,0019	0,0014	0,4404*	-0,3484*	0,0340*	0,0329*	1,0000								
colony	0,2405*	0,2342*	0,4112*	-0,0130	-0,0087	-0,0067	0,0043	-0,0780*	0,1338*	-0,0059	-0,0062	-0,2934*	1,0000							
comlang	0,3112*	0,3055*	0,2652*	0,0021	0,0060	-0,0062	0,0042	-0,0584*	0,2601*	-0,0245*	-0,0241*	-0,1144*	0,2255*	1,0000						
shareleav	0,3843*	0,2434*	0,5198*	-0,0299*	0,0127	0,1696*	0,0033	-0,0850*	0,2697*	0,0017	-0,0165*	-0,1942*	0,4246*	0,1965*	1,0000					
shareleav2	0,2571*	0,1401*	0,3703*	-0,0154	0,0137	0,1414*	0,0010	-0,0187	0,1571*	0,0040	-0,0089	-0,1042*	0,3174*	0,1018*	0,9236*	1,0000				
shareleav3	0,2007*	0,1037*	0,2901*	-0,0077	0,0124	0,1218*	0,0039	0,0008	0,1215*	0,0006	-0,0066	-0,0638*	0,2225*	0,0676*	0,8040*	0,9638*	1,0000			
mig_pop	0,2223*	0,2187*	0,3345*	-0,0103	-0,0250*	0,0302*	0,0332*	-0,0951*	0,1218*	-0,0202*	0,0239*	-0,2116*	0,4700*	0,1751*	0,1731*	0,1241*	0,1035*	1,0000		
mig_pop2	0,1014*	0,1025*	0,1956*	-0,0049	-0,0217*	-0,0041	0,0248*	-0,0476*	0,0384*	-0,0121	0,0252*	-0,1164*	0,3280*	0,1059*	0,0708*	0,0310*	0,0179*	0,9102*	1,0000	
mig_pop3	0,0739*	0,0727*	0,1438*	-0,0011	-0,0221*	-0,0048	0,0195*	-0,0367*	0,0196	-0,0102	0,0259*	-0,0842*	0,2503*	0,0811*	0,0433*	0,0106	0,0008	0,7965*	0,9679*	1,0000

Note. * - significance of coefficient estimates at 10% level, respectively.

Source: author's calculations using STATA14 package

Appendix 3. Recipient-donor country pairs in the first stage of migration since 1972

Russia-Montenegro	Russia-Serbia	Russia-Angola	Russia-Republic of Congo
Russia-Gibraltar	Russia-Guinea	Russia-Guatemala	Russia-Mauritania
Russia-Mauritania	Russia-Niger	Russia-Nicaragua	Russia-Qatar
Russia-Saudi Arabia	Russia-Singapore	Russia-Tajikistan	Russia-British Virgin Islands
Russia-Vanuatu	Russia-Turks and Caicos Islands	Russia-Andorra	Russia-Malaysia
Argentina-Germany	Argentina-Russia	Argentina-US	Armenia-Russia
American Samoa-Russia	Antigua and Barbuda-Russia	Australia-Germany	Australia-Russia
Australia-US	Austria-Switzerland	Austria-Germany	Austria-Spain
Austria-France	Austria-United Kingdom	Austria-Hungary	Austria-Italy
Austria-Netherlands	Austria-Poland	Austria-Romania	Austria-Russia
Austria-Slovakia	Austria-US	Azerbaijan-Russia	Burundi-Russia
Belgium-Germany	Belgium-Russia	Belgium-US	Benin-Russia
Burkina Faso-Russia	Bangladesh-Russia	Bulgaria-Germany	Bulgaria-Russia
Bahrain-Russia	Bosnia and Herzegovina-Russia	Belize-Russia	Bermuda-Russia
Bolivia-Russia	Brazil-Germany	Brazil-United Kingdom	Brazil-Russia
Brazil-US	Barbados-Russia	Brunei-Russia	Botswana-Russia
CAR-Russia	Canada-Germany	Canada-Russia	Switzerland-Germany
Switzerland-United Kingdom	Switzerland-Russia	Chile-Russia	China-Germany
China-UK	China-Russia	China-United States	C te d'Ivoire-Russia
Cameroon-Russia	Congo, DR-Russia	Republic of Congo-Russia	Colombia-Russia
Cape Verde-Russia	Costa Rica-Russia	Cuba-Russia	Cura ao-Russia
Cayman Islands-Russia	Cyprus-Germany	Cyprus-Russia	Czech Republic-Austria
Czech Republic-Russia	Germany-Argentina	Germany-Australia	Germany-Belgium
Germany-Brazil	Germany-Canada	Germany-China	Germany-Cyprus
Germany-Finland	Germany-France	Germany-UK	Germany-India
Germany-Ireland	Germany-Iceland	Germany-Japan	Germany-Liechtenstein
Germany-Morocco	Germany-Mexico	Germany-Malta	Germany-Malaysia
Germany-Russia	Germany-Singapore	Germany-Sweden	Germany-US
Djibouti-Russia	Dominica-Russia	Denmark-Germany	Denmark-Russia
Dominican Republic-Russia	Algeria-Russia	Ecuador-Russia	Egypt-Russia
Eritrea-Russia	Spain-Austria	Spain-Germany	Spain-Russia
Estonia-Germany	Ethiopia-Russia	Finland-Germany	Finland-Russia
Fiji-Russia	France-Austria	France-Germany	France-Russia
France-US	Micronesia-Russia	Gabon-Russia	UK-Austria
UK-Brazil	UK-Canada	UK-Switzerland	UK-China
UK-Germany	UK-India	UK-Japan	UK-Russia
Ghana-Russia	Gibraltar-Russia	Guinea-Russia	Guinea-Bissau-Russia
Equatorial Guinea-Russia	Greece-Germany	Greece-Russia	Grenada-Russia
Greenland-Russia	Guatemala-Russia	Guam-Russia	Guyana-Russia

Hong Kong SAR, China-United States	Honduras-Russia	Croatia-Austria	Croatia-Germany
Croatia-Russia	Haiti-Russia	Hungary-Austria	Hungary-Germany
Hungary-Russia	Indonesia-Russia	Isle of Man-Russia	India-Germany
India-UK	India-Russia	India-US	Ireland-Germany
Ireland-Russia	Iran-Russia	Iraq-Russia	Iceland-Germany
Iceland-Russia	Italy-Austria	Italy-Germany	Italy-Russia
Italy-US	Jamaica-Russia	Jordan-Russia	Japan-Germany
Japan-UK	Japan-Netherlands	Japan-Russia	Japan-US
Kenya-Russia	Cambodia-Russia	Kiribati Russia	Korea-Russia
Korea-US	Kuwait-Russia	Lao PDR-Russia	Lebanon-Russia
Liberia-Russia	Libya-Russia	Liechtenstein-Russia	Sri Lanka-Russia
Lesotho-Russia	Lithuania-Germany	Luxembourg-Russia	Luxembourg-US
Latvia-Germany	Macao SAR, China-Russia	Morocco-Germany	Morocco-Russia
Monaco-Russia	Madagascar-Russia	Maldives-Russia	Mexico-Germany
Mexico-Russia	Marshall Islands-Russia	North Macedonia-Russia	Mali-Russia
Malta-Germany	Malta-Russia	Myanmar-Russia	Montenegro-Russia
Mongolia-Russia	Northern Mariana Islands-Russia	Mozambique-Russia	Mauritania-Russia
Mauritius-Russia	Malawi-Russia	Malaysia-Germany	Malaysia-Russia
Namibia-Russia	New Caledonia-Russia	Niger-Russia	Nigeria-Russia
Nicaragua-Russia	Netherlands-Austria	Netherlands-Germany	Netherlands-Japan
Netherlands-Russia	Netherlands-US	Norway-Germany	Norway-Russia
Nepal-Russia	New Zealand-Russia	Oman-Russia	Pakistan-Russia
Panama-Russia	Peru-Russia	Philippines-Russia	Palau-Russia
Papua New Guinea-Russia	Poland-Austria	Poland-Germany	Poland-Russia
Puerto Rico-Russia	DPRK-Russia	Portugal-Germany	Portugal-Russia
Paraguay-Russia	French Polynesia-Russia	Qatar-Russia	Romania-Austria
Romania-Germany	Romania-Russia	Russia-Aruba	Russia-Afghanistan
Russia-Angola	Russia-Albania	Russia-Andorra	Russia-UAE
Russia-Argentina	Russia-American Samoa	Russia-Antigua and Barbuda	Russia-Australia
Russia-Austria	Russia-Burundi	Russia-Belgium	Russia-Benin
Russia-Burkina Faso	Russia-Bangladesh	Russia-Bulgaria	Russia-Bahrain
Russia-Bahrain	Russia-Bosnia and Herzegovina	Russia-Belize	Russia-Bermuda
Russia-Bolivia	Russia-Brazil	Russia-Barbados	Russia-Brunei
Russia-Brunei	Russia-Botswana	Russia-CAR	Russia-Canada
Russia-Switzerland	Russia-Chile	Russia-China	Russia-C te d'Ivoire
Russia-Cameroon	Russia-Congo, DR	Russia-Republic of Congo	Russia-Colombia
Russia-Costa Rica	Russia-Cuba	Russia-Cayman Islands	Russia-Cyprus
Russia-Czech Republic	Russia-Germany	Russia-Djibouti	Russia-Dominica
Russia-Denmark	Russia-Dominican Republic	Russia-Algeria	Russia-Ecuador
Russia-Egypt	Russia-Eritrea	Russia-Spain	Russia-Ethiopia

Russia-Finland	Russia-Fiji	Russia-France	Russia-Micronesia
Russia-Gabon	Russia-UK	Russia-Ghana	Russia-Guinea
Russia-Guinea	Russia-Guinea-Bissau	Russia-Equatorial Guinea	Russia-Greece
Russia-Grenada	Russia-Greenland	Russia-Guatemala	Russia-Guam
Russia-Guyana	Russia-Honduras	Russia-Croatia	Russia-Haiti
Russia-Hungary	Russia-Indonesia	Russia-India	Russia-Ireland
Russia-Iran	Russia-Iraq	Russia-Iceland	Russia-Israel
Russia-Italy	Russia-Jamaica	Russia-Jordan	Russia-Japan
Russia-Kenya	Russia-Cambodia	Russia-Kiribati	Russia-Korea
Russia-Kuwait	Russia-Laos PDR	Russia-Lebanon	Russia-Liberia
Russia-Libya	Russia-Liechtenstein	Russia-Sri Lanka	Russia-Lesotho
Russia-Luxembourg	Russia-SAR Macao, China	Russia-Morocco	Russia-Monaco
Russia-Madagascar	Russia-Maldives	Russia-Mexico	Russia-Marshall Islands
Russia-Mongolia	Russia-Mali	Russia-Malta	Russia-Myanmar
Russia-North Macedonia	Russia-Northern Mariana Islands	Russia-Mozambique	Russia-Mauritania
Russia-Mauritius	Russia-Malawi	Russia-Malaysia	Russia-Namibia
Russia-New Caledonia	Russia-Niger	Russia-Nigeria	Russia-Nicaragua
Russia-Netherlands	Russia-Norway	Russia-Nepal	Russia-New Zealand
Russia-Oman	Russia-Pakistan	Russia-Panama	Russia-Peru
Russia-Philippines	Russia-Palau	Russia-Papua New Guinea	Russia-Poland
Russia-Puerto Rico	Russia-DPRK	Russia-Portugal	Russia-Paraguay
Russia - French Polynesia	Russia-Qatar	Russia-Romania	Russia-Rwanda
Russia-Saudi Arabia	Russia-S o Tom and Principe	Russia-Solomon Islands	Russia-Singapore
Russia-Senegal	Russia-Sudan	Russia-El Salvador	Russia-San Marino
Russia-Somali	Russia-Sierra Leone	Russia-Slovakia	Russia-Slovenia
Russia-Sweden	Russia-Eswatini	Russia-Seychelles	Russia-Syria
Russia-Chad	Russia-Togo	Russia-Thailand	Russia-East Timor
Russia-Tonga	Russia-Trinidad and Tobago	Russia-Tunisia	Russia-Turkey
Russia-Tanzania	Russia-Uganda	Russia-Uruguay	Russia-United States
Russia-Venezuela, RB	Russia-Virgin Islands (United States)	Russia-Vietnam	Russia-Vanuatu
Russia-Samoa	Russia-Yemen	Russia-South Africa	Russia-Zambia
Russia-Zimbabwe	Rwanda-Russia	Saudi Arabia-Russia	Sao Tome and Principe-Russia
Senegal-Russia	Singapore-Germany	Singapore-Russia	Singapore-US
Solomon Islands-Russia	Sierra Leone-Russia	El Salvador-Russia	San Marino-Russia
Somalia-Russia	Serbia-Russia	South Sudan-Russia	Sudan-Russia
Slovakia-Austria	Slovakia-Russia	Slovenia-Austria	Slovenia-Germany
Slovenia-Russia	Sweden-Germany	Sweden-Russia	Eswatini-Russia
Seychelles-Russia	Syria-Russia	Turks and Caicos Islands-Russia	Chad-Russia
Togo-Russia	Thailand-Russia	East Timor-Russia	Tonga-Russia
Trinidad and Tobago-Russia	Tunisia-Russia	Turkey-Germany	Turkey-Russia

Tuvalu-Russia	Tanzania-Russia	Uganda-Russia	Uruguay-Russia
United States- Virgin Islands - Russia	Venezuela, RB-Russia	Venezuela, RB-United States	British Virgin Islands-Russia
United States-Russia	Vietnam-Russia	Vanuatu-Russia	Samoa-Russia
Yemen-Russia	South Africa-Russia	South Africa-United States	Zambia-Russia
Zimbabwe-Russia			

Capital Concentration in The Global Economy as a Factor of Unequal Distribution of Income

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For citation: Voskanyan, Mariam and Khurshudyan, Susanna, 2023. Capital Concentration in the Global Economy as a Factor of Unequal Distribution of Income, *Contemporary World Economy*, Vol. 1, No 2.

DOI: https://doi.org/10.17323/2949-5776-2023-1-2-75-92

Keywords: global economy, capital concentration, unequal distribution of income, Armenia.

Abstract

The problem of unequal income distribution has always been relevant. This article is devoted to the analysis and assessment of the level of capital concentration in the world and, as a consequence, the unequal distribution of income in the world economy and in Armenia in particular. The paper shows the unevenness of capital accumulation in volume and per capita in the leading countries of the world as well as in the post-Soviet countries. The capital accumulated in some countries makes it possible to transform economic systems and ensure development on an unprecedented scale. At the same time, uneven accumulation widens the gap between capital-rich and capital-poor countries. Among the factors contributing to the problem of capital concentration is globalization. The concentration of capital through the creation of a global market has created new opportunities for lagging countries to become fully integrated into the world economic process. In reality, however, the process has had the opposite effect, with the benefits of globalization accruing mainly to the large owners of capital.

Many countries remain outside the process of global economic development, and acute inequality in income distribution, both within countries and globally, remains an unresolved issue. The research has examined in detail the theoretical background to the increasing concentration of capital in the world, highlighting the positive and negative factors in its impact on economic growth. The paper also considered the example of the Armenian economy. The study concluded that capital concentration leads to unequal distribution of income in the world, but at the same time it is a key factor of economic growth for many countries.

1. Introduction

Unequal distribution of income and capital is one of the most pressing issues in the modern global economy. At the same time, the problem of inequality is currently based on a high degree of capital concentration and an unequal distribution of resources between capital and labor. More specifically, the unequal distribution of resources between the owners of these two factors of production (Piketty 2014).

Before the Industrial Revolution, in feudal society, wealth was mainly concentrated in the hands of large landowners, it was inherited, and the heirs of these landowners had the advantage of previously accumulated capital. People who did not have this wealth had to work for the feudal lord without even receiving a wage for their labor. As a result of the Industrial Revolution, capital accumulation shifted from landowners to the industrialists. At the same time, the wealth accumulated through capital was much greater than the wealth accumulated by landowners through the exploitation of peasant labor, i.e. the gap between the owners of capital and labor became much greater in the nineteenth century than it was before the Industrial Revolution (Sundaram, Popov 2015).

Simultaneously, the capital accumulated in individual countries served as a foundation for the industrial revolution: Countries with more capital made the transition to industrial society faster. Accumulated capital also plays an important role in the process of international capital movements. While it was initially one-way—from metropolises to colonies—it later became more stable as there was an active two-way movement of capital between countries, and even from countries themselves in need of investment. Today, the main actors in the international movement of capital are transnational corporations, whose capital flows and accumulates outside the borders of national economies.

2. Capital Concentration and Economic Development

Not surprisingly, the question of the distribution of accumulated capital in an industrial society has been a central concern of economists since the beginning of the Industrial Revolution. From Thomas Malthus, for whom "overpopulation was the main problem" (Malthus 1798) of distribution and growing social and political problems, to David Ricardo, who was convinced that a small social group represented by landowners would

appropriate more and more of the products of production and wealth (Ricardo 1817), to Karl Marx, who shared Ricardo's view but saw this group as the industrial capitalists (Marx 1867), most economists tended to believe that inequality would continue to escalate and worsen. The rapidly increasing inequality caused by the growth of income from capital investment against the background of the stagnation of income from labor since the mid-19th century was the most important condition for the development of socialist movements and the spread of Marxist ideas.

Marx's contribution to explaining the problems of capital concentration and inequality is very significant. Marx was able to foresee the changing role of different factors of production. In traditional societies, the volume of production was a direct result of the labor resources used. Marx foresaw that the role of labor would continue to lose its original importance in favor of capital, and that "the tendency of capital is to give production a scientific character and to reduce direct labor to a mere aspect of the process of production." [1] The "principle of infinite accumulation," which is the main conclusion of Das Kapital, states that the inevitable tendency of capital to accumulate and concentrate on an infinite scale can lead either to a decrease in the rate of return on capital or to an unlimited increase in the share of capital in national income. In either case, socio-economic and political equilibrium cannot be ensured (Piketty 2014).

The shift from land ownership to industry gave rise to the massive movement of rural populations to cities, urbanisation. This led to a relative equalization of incomes between rural and urban workers (the urban workforce grew, leading to a decline in individual incomes, while the opposite was true in the villages) and a subsequent decline in inequality in income distribution. In economic theory, the relationship between inequality and per capita income is illustrated by the Kuznets curve, with Kuznets arguing in the 1950s and 1960s that social inequality increases with economic development and then decreases as a result of market forces (Kuznets 1955). In the 20th century, events such as the world wars, the Great Depression in the U.S., the Bolshevik Revolution and aggressive government policies of taxation and redistribution led to a significant reduction in inequality indicators (Piketty 2014). Workers' wages also began to rise due to the spread of the Keynesian regulatory approach, whereby an increase in the share of labor income in national wealth would subsequently lead the recipients of that income to spend more, and thus capital income would also rise (Titenko, Korneva 2016). The share of labor income in national income grew until the middle of the twentieth century. Since the second half of the century, however, the issue has gained new momentum, mainly due to the acceleration of the globalization process and the emergence of such economic entities on the global stage as transnational corporations (TNCs). The process of international movement of capital and labor has changed. The increasing role of capital in the production process has increased the role of human capital (knowledge, skills and qualifications), which many economists believe has a direct impact on economic growth: human capital is used to make the innovations that ensure growth.

The impact of globalization on international economic processes as well as on the development and history of countries is immense. For example, the problems of

[1] Cited from: Belykh, Mau 2018.

individual developed countries or large corporations affect other entities beyond their borders and become global issues. The existence of strong global actors such as TNCs (or countries that are "overdeveloped" compared to the rest of the world) challenges the sovereignty of less developed countries (similar to colonies and metropolises in the early stages of capital movement), only now through a process of submission to international norms and rules in exchange for joining the global economy or integration associations.

Another trend closely related to capital concentration is the decline of the middle class, which is also the subject of research by many economists. The shrinking middle class is the result of growing income inequality and increasing concentration of capital in the hands of a small group of people (Milanovic 2016). As a result, the middle class may either reskill to further improve its social position (which is rarer) or, conversely, the quality of life of the middle class may decline. The growing concentration of capital favors the latter, and as a result increases social tensions and worsens social mobility (Piketty 2014).

For a more detailed look at the problems of inequality, let U.S. consider the forms of capitalism applied by different countries. William Baumol divides contemporary capitalism into several types (Baumol 2007):

1. State capitalism, where most key economic decisions are made by the state.
2. Oligarchic capitalism, where a limited number of individuals hold wealth and power.
3. Entrepreneurial capitalism, where small and medium-sized enterprises play a significant role in economic development, particularly through innovation.
4. Big business capitalism, where large corporations or TNCs play a significant role in economic development.

The choice of one form of capitalism or another determines the trajectory of a country's development. These forms are not implemented in a pure state and do not exclude each other, but one of them predominates in the politics of individual countries, and it varies at different stages of development. For example, in the U.S. there is a clear predominance of entrepreneurial capitalism combined with big business capitalism (Klinov 2017), in China there is state capitalism combined with big business capitalism, and in more underdeveloped countries and many post-Soviet states oligarchic capitalism dominates.

These forms determine, among other things, the extent of the problem of inequality and high concentration of capital in a country, as well as the extent to which countries' policies prioritize development and growth. In countries with an oligarchic form of capitalism, the problem of income and wealth distribution is exacerbated because the development of the country is often not the main goal of government policy, which is instead aimed at preserving and increasing the power and wealth of the oligarchs. In such countries, according to William Baumol, "revolution may be the most effective (and perhaps the only) means of abolishing oligarchic capitalism and moving to a system in which growth becomes the primary goal of government" (Baumol 2007).

In the early stages of development in capitalist countries, this form of capitalism prevailed as the accumulation of capital in the hands of individuals served as

an important engine of economic growth. Later, as the economy developed, the role of the state became increasingly important (as can be seen in the example of catching-up countries, where in the early stages the role of the state in regulating the market and creating institutions to ensure growth was indispensable). As institutions develop in a country, state capitalism loses its initial role and the role of another type of capitalism—big business—increases. The state does not lose its role in the distribution of income and wealth, but the way in which it intervenes changes. For example, as noted above, state intervention in economic and political processes in the twentieth century led to a reduction in income inequality. Today, state capitalism also reduces the gap between different segments of society.

Tom Piketty has shown that social inequality in the U.S. and Europe has been on the rise again since around the 1970s. Thus, a certain improvement between the world wars and in the first decades after the Second World War has been replaced by a reversal, putting science and economic policy in a challenging situation (Pikkety 2014).

Globalization has led to an increasing role for big business capitalism, and this form is currently dominant in developed market economies. In some developed countries, a slow transition to entrepreneurial capitalism is taking place.

The growing role of big business capitalism has led, among other things, to a greater concentration of capital in the hands of TNCs. As noted above, these companies are beyond the control of governments, which complicates the application of state regulatory measures. On the one hand, TNCs have enough money to invest in research and development and to develop the economy of one country or another. On the other hand, many TNCs have no interest in doing so, since their market power gives them long-term competitive advantages, leading to even greater concentration of capital without further redistribution. Thus, as TNCs have become more capitalised, income inequality has increased again and the gap between developed and developing countries has widened.

Globalization and the increasing role of large corporations in some countries have also made resources more mobile. For example, productive resources, especially raw materials, move from developing countries to developed countries through TNCs, which, because of their accumulated capital, can (according to economic theory) make better use of these resources and subsequently concentrate even more resources in their own countries.

Countries that export these raw materials, in turn, experience capital outflow, as the TNCs, and not the countries that originally owned these resources, receive the capital income. The latter are only interested in exploiting the resources of these countries, not in developing them, which means that the developed countries, represented by the TNCs, benefit from globalization because they have new opportunities to control resources. Of course, TNCs also benefit the host country by contributing in some way to its development. However, there is a disproportion between the level of development of these countries and the tendency for capital to be concentrated in TNCs as a result of the use of cheap production resources. Development is taking place at a much slower pace than the trend of capital outflow and concentration. Thus, on balance, the developing countries that host these corporations lose out.

The movement of capital from developing to developed countries leads to its concentration in the latter, giving these countries political and economic power. For example, the vast majority of TNCs are currently American, which has become one of the reasons for global unipolarity. Globalization has led to the formation of a world order in which international organisations no longer act on the basis of international law, but rather formalise the power politics of the leading countries through their decisions (Rybalkin, Shcherbanin, Baldin et al. 2003).

The movement towards entrepreneurial capitalism could become a new driver of global development. According to many studies, small and medium-sized enterprises are more important than large companies in the creation of new technologies and are the carriers of innovation and development (Schumpeter 1934). Such firms do not have sufficient capital to invest in research and development, while large firms are not motivated to do so. The further development of entrepreneurial capitalism may lead to increased competition and less concentration of capital in the hands of a limited number of firms and thus to a reduction in income inequality. At present, however, the following conclusions can be drawn:

- Concentration of wealth (capital) is observed at different stages of development of economic systems, but the ways of capital accumulation change with the course of their development.
- The process of concentration and accumulation of sufficient capital was the main prerequisite for the industrial revolution.
- The concentration of capital at that time was the cause of rapid economic growth, especially in countries where this concentration was higher (e.g., England).
- The concentration of capital was also accompanied by an unequal distribution of income, which in turn led to social injustice and high levels of poverty in some countries.

3. Capital Concentration in the Global Economy: Major Trends

Accumulated wealth plays an important role in economic development, so let U.S. look at how the world's wealth is distributed among countries. In this respect, it is interesting to analyse the data on capital concentration by country, first of all in terms of their share of world capital, as well as the dynamics of changes in this share over the last few decades.

As we can see in Figure 1 (p. 77), in 1995 the United States was in first place in terms of its share in world capital formation. And this share was larger than that of the rest of the world excluding the top 10 countries. Japan came second (10.5%), followed by China (6.7%), Germany (6.4%), France (4.4%), the United Kingdom (3.6%), Italy (3.1%), Russia (3%) and Canada (3%).

The capital concentration pattern changes if we consider this indicator on a per capita basis (see Figure 2). In this case, the U.S. still ranks first in the top ten, but China is already ninth in the top ten in terms of total capital accumulated in 1995 (about 4.9% of the U.S. figure). At the same time, the rest of the population accounts for a negligible amount (about 4.5 % of the U.S. figure).

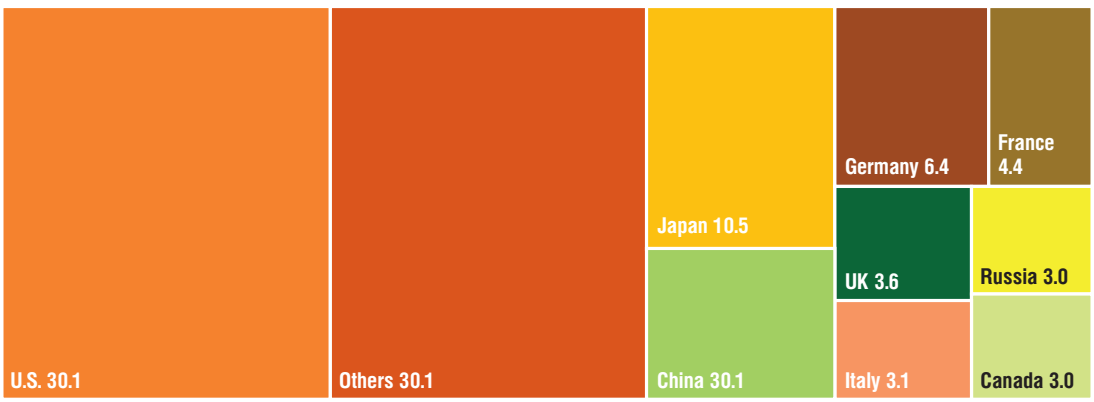

Figure 1. Top 10 countries in terms of capital formation, in % of global capital formation, 1995.

Source: World Bank database - https://databank.worldbank.org/

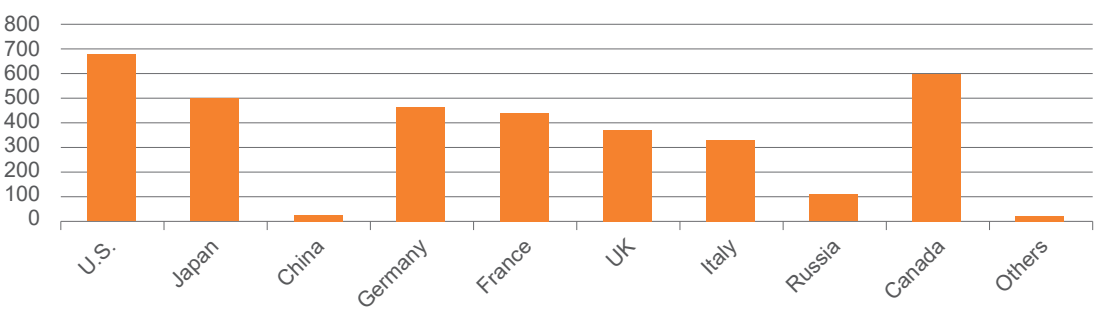

Figure 2. Accumulated capital per capita in the top 10 countries in terms of accumulated capital, in thousands of U.S. dollars, 1995.

Source: World Bank database - https://databank.worldbank.org/

The concentration of capital in the world has changed significantly by 2018 (see figure 3, p. 78). Although the United States is still the world's leading economy, its share has fallen to 24.7%, while China has tripled its share to 21.1%. At the same time, the top ten countries have reduced their share of total world capital. Another important change is the addition of Brazil to the list. As in many other cases, developing countries are rapidly assuming dominant positions on the world stage. China is now leading this process, but other emerging economies are significantly strengthening their position in terms of gross capital formation, not to mention their success in terms of economic growth and share of global GDP. A good example is India, where the share of gross capital formation has grown 3.7 times since 1995, well above the world average of 1.65 times.

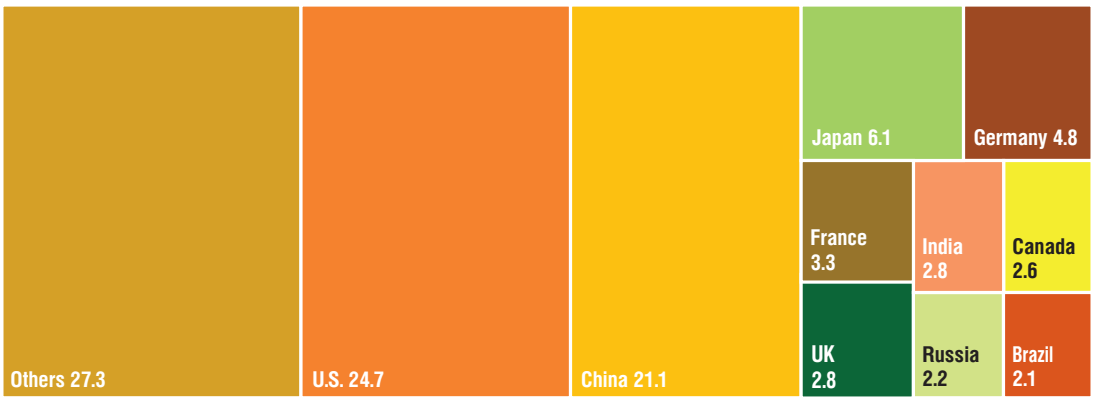

Figure 3. Top 10 countries in terms of capital formation, in % of global capital formation, 2018.

Source: World Bank database - https://databank.worldbank.org/

It should be noted that the distribution of per capita wealth in 2018 differs significantly compared to 1995 (see Figure 4, p. 78). Although the U.S. has consistently ranked in the top ten, China's figure has increased significantly and reached 18.8 % of the U.S. level, while the rest of the countries' figures are 5.5 % of the U.S. level.

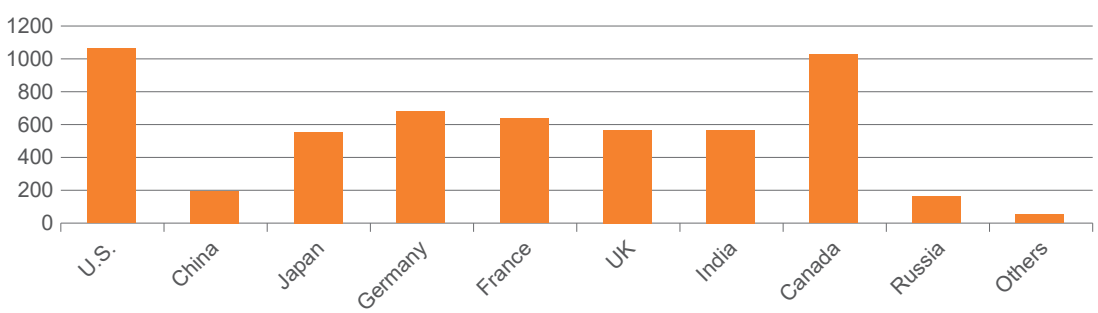

Figure 4. Accumulated capital per capita in the top 10 countries in terms of accumulated capital, in thousands of U.S. dollars, 2018.

Source: World Bank database - https://databank.worldbank.org/

As noted in Section 1, the accumulation of capital within a country has historically meant that it is better placed to embark on a path of development than countries that do not possess this capital. Sufficient capital accumulation in England led to a much faster industrial revolution than in the rest of the world; Japan, thanks to its accumulated capital, was able to rebuild its economy in a very short time after the war and become

an advanced technological nation, etc. China's economic development strategy in recent decades has also been based on accumulating wealth at a faster rate than consumption growth. As of 2018, China is the world's second largest economy in terms of accumulated capital, just behind the US. Therefore, it is safe to say that wealth accumulation is one of the most important drivers of endogenous growth.

Turning to trends in accumulated capital, it is worth noting that, despite the leading position of developed countries, the rate of capital accumulation is significantly higher in developing countries (see Figure 5, p. 79). The average annual growth rate of accumulated capital in the world between 1995 and 2018 was 2.9 %; for the U.S. it was 2 %, for China 8.1 % and for India 5.7 %.

Data on accumulated capital after 2018 are not available. Assuming that the average growth rate for these countries is maintained until 2023, China is expected to lead with 26% of the world's accumulated wealth; the U.S. follows in second place with 22.7% of the world's wealth; third and fourth places are held by Japan and Germany with 5.25% and 4.37%, respectively; and India moves into fifth place, overtaking France and the UK, with 3.12% of the world's wealth (Table 1, p. 80; Figure 5, p.79).

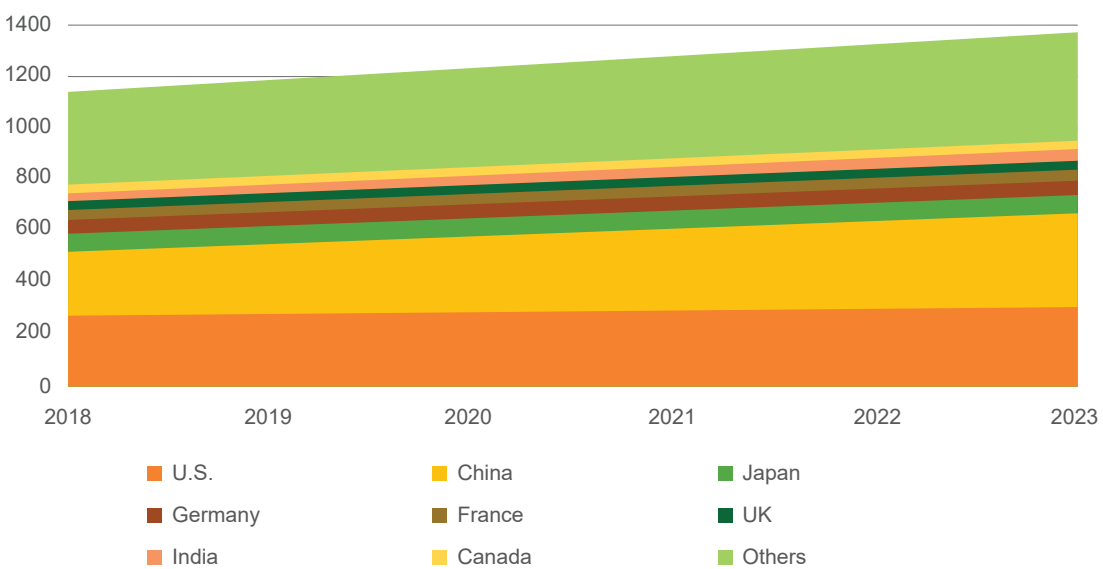

Figure 5. Structure of global capital formation in 2018-2023, in trillion dollars, estimated by the average annual growth rate for each country over the period 1995-2018.

Source: World Bank database - https://databank.worldbank.org/

Of course, the situation may have changed as a result of the crisis caused by the COVID-19 pandemic, as there was a jump in market capitalisation and, consequently, concentration of capital in the leading TNCs (most of which are American), and therefore these results may deviate from reality. Nevertheless, disregarding the pandemic, the following picture should have emerged in 2023 (Table 1, p. 80).

Table 1. Top 20 countries by capital accumulated in 1995, 2018, 2023 (forecast), share in global capital accumulation

Country	1995	Global rank	2018	Global rank	2023*	Global rank
United States	30.10%	1	24.74%	1	22.76%	2
China	6.69%	3	21.08%	2	26.00%	1
Japan	10.52%	2	6.14%	3	5.25%	3
Germany	6.45%	4	4.84%	4	4.37%	4
France	4.44%	5	3.29%	5	2.96%	6
United Kingdom	3.63%	6	2.85%	6	2.60%	7
India	1.50%	13	2.83%	7	3.12%	5
Canada	2.95%	9	2.65%	8	2.48%	8
Russia	2.99%	8	2.17%	9	1.95%	10
Brazil	2.53%	10	2.13%	10	1.97%	9
Italy	3.15%	7	1.97%	11	1.71%	12
Australia	1.58%	12	1.79%	12	1.77%	11
South Korea	1.12%	17	1.60%	13	1.66%	13
Spain	1.83%	11	1.33%	14	1.20%	14
Indonesia	0.92%	19	1.12%	15	1.13%	15
Mexico	1.20%	16	1.08%	16	1.02%	16
Netherlands	1.26%	14	1.03%	17	0.95%	17
Saudi Arabia	1.00%	18	0.95%	18	0.90%	18
Switzerland	1.24%	15	0.95%	19	0.86%	19
Sweden	0.76%	20	0.66%	20	0.62%	20

Source: World Bank database - https://databank.worldbank.org/

*-data for 2023 is calculated based on average annual growth rate

4. Structure of Accumulated Capital

The accumulated capital or total wealth of a country consists of four components: human capital, natural capital, produced capital, and net foreign assets. Of course, each of these components is important in the development path, but the way in which this wealth is used for development purposes and the proportions in which these components make up total wealth determine a country's level of development. Figure 6 (p. 81) shows the components of total wealth for developed countries. China and the United States are the leaders in terms of absolute natural capital, but natural capital represents only a small fraction of total wealth (4% for China and 2% for the United States). Saudi Arabia ranks third in terms of natural capital, but it accounts for 46.6% of total wealth in the country. For Iraq, the share of natural capital is 66%, for the UAE 26.9%, for Kuwait 46%, and for

Qatar 39.9%. Compared to the U.S. and China, the other components of wealth are less developed in these countries. For the leading countries shown in Figure 6 (excluding Saudi Arabia, Kuwait and Qatar), the average ratio of wealth components is as follows:

1. Human capital: 59.7 %.
2. Natural capital: 2.4%.
3. Produced capital: 36.7%.
4. Net foreign assets: 1.3%.

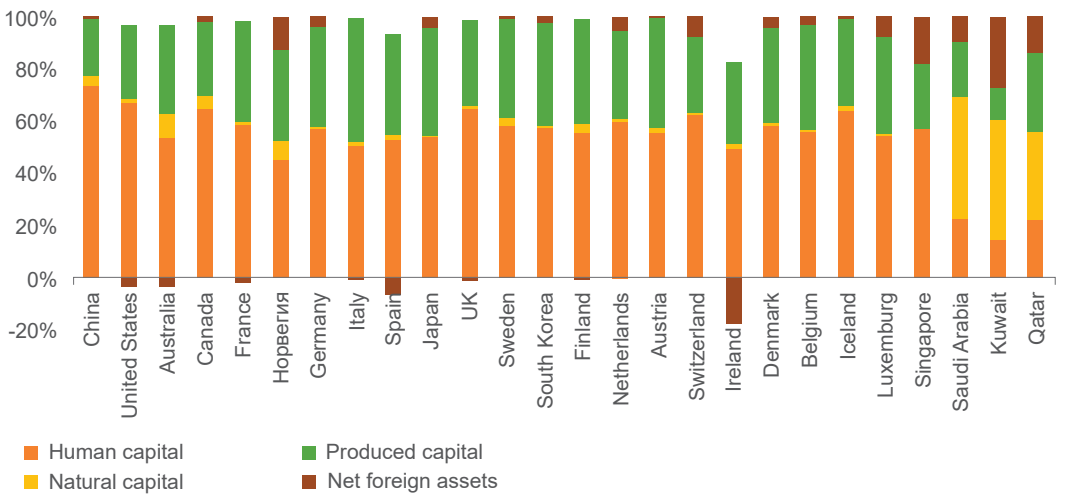

Figure 6. Components of wealth in the world's leading countries, 2018

Source: World Bank database - https://databank.worldbank.org/

Thus, the main component of wealth in these countries is human capital. Net foreign assets in most developed countries are positive, i.e., entities in these countries own more foreign assets than foreign entities do in those countries. Thus, capital outflows from these countries are greater than inflows.

In China, the average value of the shares of wealth components in total wealth is as follows:

1. Human capital: 73.3%.
2. Natural capital: 3.9%.
3. Produced capital: 22%.
4. Net foreign assets: 0.08%.

This suggests that China has made an economic leap based on the growth of human capital. The lack of large mineral resources is not an obstacle to growth, but it does require more sophisticated development policies, which is clearly reflected in the level of accumulated capital of different countries. At the same time, the capital gap between China and the United States remains.

The international movement of capital, and more generally the essence of a capital-based market economy, implies that capital should flow from developed countries (or

countries where there is a surplus of this capital) to countries where there is a shortage of capital (and consequently the return on capital is higher), i.e., developing and underdeveloped countries.

Let us look at the components of wealth and the countries at the bottom of the list in terms of total wealth and the components of their national wealth (Figure 7, p. 82).

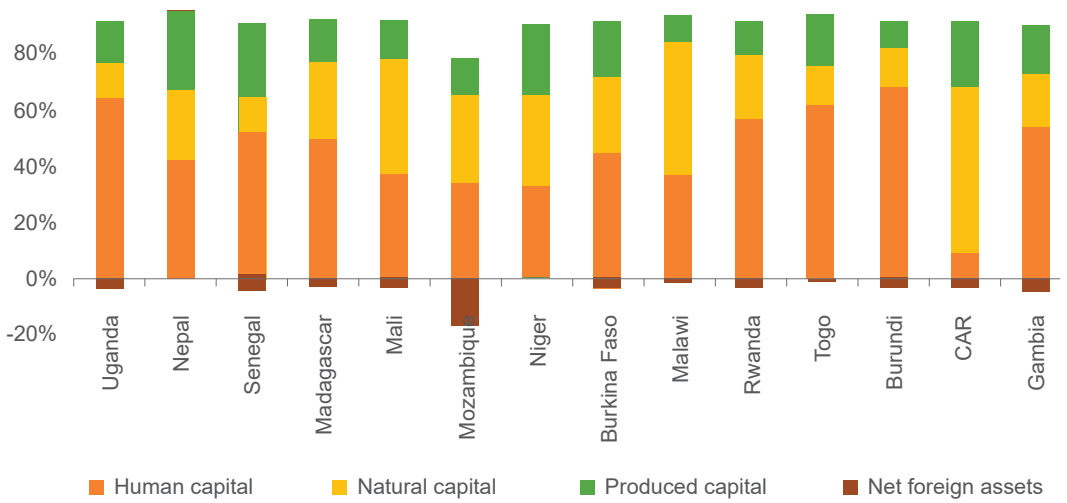

Figure 7. Wealth components of least developed countries, 2018

Source: World Bank database - https://databank.worldbank.org/

The difference in the ratio of components is striking. At first glance, some of these countries may appear to have developed human capital, as its share in total wealth is relatively high; however, in absolute terms, the amount of human capital is very small. Most of these countries are traditional economies, so the share of natural capital in total wealth is relatively high and manufactured capital plays a small role. The share of net foreign assets is expressed in negative values, i.e., in this case capital inflows from the remaining countries exceed capital outflows from these countries. In general, the average value of the component shares for the selected countries is as follows::

1. Human capital: 52.6%.
2. Natural capital: 32.2%.
3. Produced capital: 20.4%.
4. Net foreign assets: -5.2 %.

Looking at the general trends of the above groups of countries, it can be observed that capital flows from developed to developing countries and that the main asset of developed countries compared to developing countries is human capital. The development of human capital can be a good development opportunity for countries that do not have natural capital.

5. Factors of Capital Concentration in Developing Countries: The Case of Armenia

Among the developing countries, consider the post-Soviet countries and their wealth components (see Figure 8, p. 83).

Compared to the least developed countries, the share of productive capital is higher in these countries, and natural capital also plays a significant role. The average shares of capital components in the post-Soviet countries are as follows:

1. Human capital: 41%.
2. Natural capital: 22.4%.
3. Produced capital: 42.4%.
4. Net foreign assets: -5.8%.

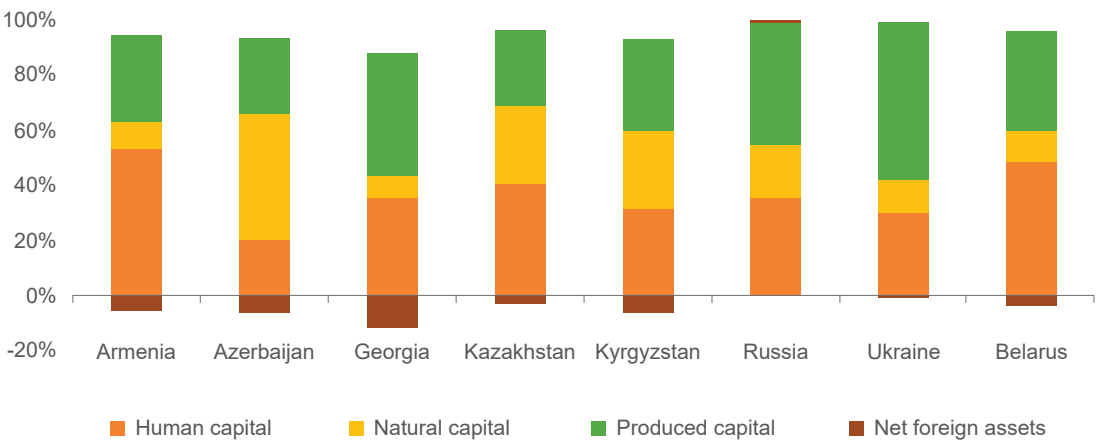

Figure 8. Wealth components of post-Soviet countries, 2018

Source: World Bank database - https://databank.worldbank.org/

In all countries except Russia, foreign companies own more assets in the country than domestic companies own abroad.

It is also important to note that, in most cases, natural capital dominates in extractive economies. On the other hand, in Russia, for example, production capital dominates, despite the huge role of the commodity segment in the country's economy.

Table 2 (p. 83) presents the indicators shown in Figure 8 (p. 83) in dollar terms.

Table 2. Post-Soviet countries and components of their wealth per capita, in U.S. dollars, 2018

	Human capital	Natural capital	Produced capital	Net foreign assets
Armenia	30547.51	5493.624	18326.2	-3376.67
Azerbaijan	8173.801	18832.27	11209.88	-2740.16
Georgia	18142.14	3920.116	22775.96	-6182.68

	Human capital	Natural capital	Produced capital	Net foreign assets
Kazakhstan	44364.47	30528.82	30536.5	-3835.04
Kyrgyzstan	5151.707	4634.579	5588.752	-1129.89
Russia	61473.2	32965.4	78047.35	2021.891
Ukraine	19644.14	7650.702	38217.22	-607.027
Belarus	42015.97	9787.67	31693.59	-3668.02

Source: World Bank database - https://databank.worldbank.org/

As far as Armenia is concerned, the structure of accumulated capital is such that human and production capital predominate, which are the country's competitive advantages.

Figure 9. Distribution of income in Armenia

Source: World Inequality Database - https://wid.world/

There is a direct correlation between the ratio of wealth components and inequality: the growth of the Armenian economy leads to an increase in the gap between the top 1% of the population and the bottom 50%. The development of productive capacities, human capital, GDP per capita, etc. does not increase the income of the majority of the population (there is a correlation, but it is too weak). They mainly benefit big business, not the economy as a whole. The situation is the same in Russia and other post-Soviet countries with oligarchic capitalism: all the country's major capital-intensive industries are concentrated in the hands of a small group of people. The Gini coefficient for income distribution in Armenia (0.57–0.58) is really high (Figure 9, p. 84), significantly higher than not only in Europe but also in China and Russia. The values of the Gini coefficient for wealth distribution are also extremely high (0.83–0.84).

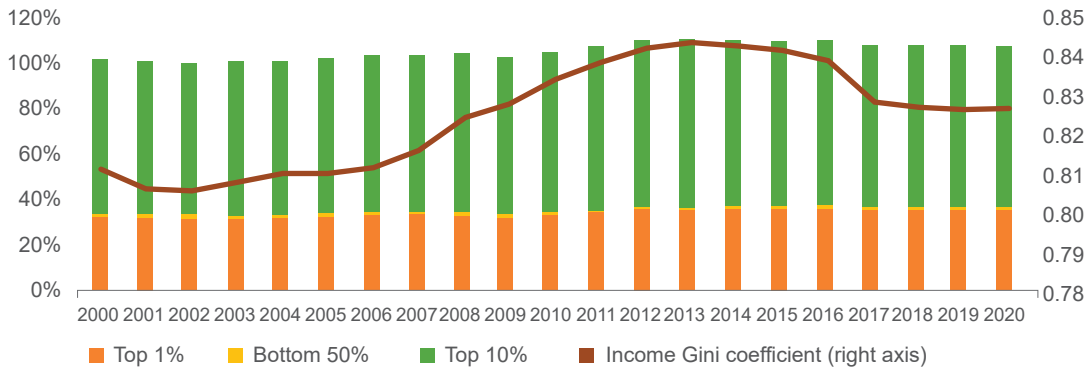

Figure 10. Distribution of wealth in Armenia

Source: World Inequality Database - https://wid.world/

In China and the U.S., there is a direct correlation between income inequality and economic growth, i.e., inequality increases as growth drivers develop. In Armenia and other post-Soviet countries, the opposite is true. This is good from the point of view of equity, but on the other hand, it means that in these countries, human capital does not determine the trend of income growth, and the income gap between high-skilled and low-skilled labor increases very slowly, while responding poorly to external conditions.

Indeed, the example of the Armenian economy shows that excessive concentration of capital is an obstacle to development. For Armenia, the situation is complicated by an underdeveloped capital market, with key industries in the hands of a limited number of people. The widening wealth gap between the top 1% and the bottom 50% of the population can only have a negative impact on the development of the Armenian economy and the country as a whole.

As mentioned above, the income of the bottom 50% does not correlate with the Gini coefficient, neither in terms of income nor in terms of wealth, and the general trend of this indicator is determined by the income and wealth trends of the top 1% of the population (while the trend of the top 10% moves in the same direction as the trend of the top 1%).

Thus, the high level of income inequality in Armenia, expressed as the ratio of the income of the top 1% of the population to that of the bottom 50%, can be seen as the result of the initial unequal distribution of capital, for example, private property as a result of ineffective privatization.

6. Main Conclusions

To summarise the research carried out, it can be said that in traditional societies, the volume of output depends mainly on labor productivity, as the economy is dominated by labor-intensive industries that are by and large dependent on a single factor of

production, labor. This can be seen in our selected African countries, where capital concentration and level of development are not correlated, and improvements/declines in development indicators have little impact on labor income.

In developed countries, however, the role of labor resources is diminishing in favor of capital resources, with the result that the recipients of labor income, especially low-skilled workers who make up the middle class, either have to increase their human capital and move up the ladder or, conversely, move down the ladder in terms of income and wealth. In this way, the middle class shrinks and the concentration of capital increases.

Unfortunately, the fact that income and wealth are not correlated means that in most cases the wealth of the richest families is passed down from generation to generation, and the heirs of the richest families only add to the wealth accumulated before them. Since, due to economies of scale, capital gains are faster for already concentrated capital, there is little scope for social mobility for the rest of the population, and even if there is, the leap is not very high. Therefore, a person who does not own generational wealth cannot claim the level of wealth of the heirs of the richest families during their lifetime. This trend is set to increase as capital becomes more concentrated.

Of particular interest are the post-Soviet countries with an oligarchic form of capitalism. In these countries, including Armenia, incomes are almost unresponsive to economic conditions, and improvements in economic performance lead to a divide between social strata, as the sectors that underpin economic growth are controlled by a limited number of individuals and benefit only them.

Thus, the general conclusion can be seen as the thesis that concentration of capital, if properly directed, can lead to rapid growth and development of a country, but excessive concentration, on the contrary, begins to widen the gap between the income and wealth of the population. For capital-deficit countries like Armenia, it is crucial to channel capital properly to develop the sectors of the economy, which requires systematic action by the government.

Capital accumulation allowed China to become a new economic center of the world alongside the U.S. in a few decades, so its role in the country's development cannot be ignored. Although Armenia's capabilities cannot be compared to those of China, with the right policy of using the accumulated and reproducible human and physical capital, it is possible to embark on the path of long-term and dynamic development.

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Organization of Turkic States: Development Prospects and Risks for the EAEU

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For citation: Zhivalov, Vladimir, Chimiris, Ekaterina and Aliyev, Timur, 2023. Organization of Turkic States: Development Prospects and Risks for the Eurasian Economic Union. *Contemporary World Economy*, Vol. 1, No 2.

DOI: https://doi.org/10.17323/2949-5776-2023-1-2-93-111

Keywords: Turkic world, regional integration associations, post-Soviet space, geopolitical reality, Turkic integration, risks, summit, trade and economic cooperation, Eurasian Economic Union, Central Asia.

Abstract

The article analyses the stages of development of the Organization of Turkic States (OTS) as an international organization. The active consolidation measures taken by Turkey to establish economic relations with the independent states of Central Asia are examined, and the main directions of development of the international economic relations of the OTS states are studied. On the basis of the collected and analyzed data, it is concluded that the interest of the OTS countries in expanding their spheres of influence is evident at the present time. The current state

of international economic relations of the new Eurasian regional integration associations, the OTS and the Eurasian Economic Union (EAEU), which emerged after the destruction of the common economic space of the USSR, is examined. The article reveals promising directions of economic development of the OTS, which allow us to consider it as a specific risk factor for the EAEU.

Foreword

An obvious reality of today's global economy is the shift in power from developed to developing countries. As a result of the rapid development of the economic power of developing countries, the world is undergoing a process of restructuring, leading to the emergence of new integration partnerships. In the last 30 years, Turkey's activities in the post-Soviet space, especially in the countries of Central Asia (CA), led to the creation of the international organization OTS. According to the political scientist Rais Suleymanov, "Turkey is trying to reorient the republics of the former Soviet Union toward itself, and all this fits into the doctrine of Pan-Turkism: many states–one Turkic nation."[1]

The emergence of new states in the post-Soviet space, linked to the process of the collapse of the Soviet Union, has significantly reduced Russia's influence over these states. This has created a desire on the part of major world powers to engage in the geoeconomic space of the former Soviet Union. Turkey has seized the opportunity to rally around itself the states whose populations are predominantly Turkic, and is seeking to create a "Turkic world" with the support of the peoples united by cultural and linguistic commonalities in the post-Soviet space. Thanks to Turkey's initiative, the Turkish vector has become one of the most dynamic in Central Asia and certain regions of Russia where Turkic peoples live.

The process of establishing the OTS as an international organization, which began in the 1990s, went through several stages of development.

The first stage began after the collapse of the USSR with the Ankara Summit in 1992, which brought together the presidents of six states (Turkey was represented by President Turgut Ozal, Azerbaijan by Abulfaz Elchibey, Kazakhstan by Nursultan Nazarbayev, Kyrgyzstan by Askar Akayev, Uzbekistan by Islam Karimov, and Turkmenistan by Saparmurat Niyazov). Given the success of the meetings, the presidents continued the practice of organizing such summits. The meetings were held in Istanbul in 1994, 2001 and 2010, in Bishkek in 1995, in Tashkent in 1996, in Astana in 1998, in Baku in 2000 and in Antalya in 2006.

The second stage of cooperation was the legal formalization of the organization of Turkic states. In 2009, the Cooperation Council of Turkic-speaking States (CCTS, Turkic Council) was established in Nakhchivan. It was established as an intergovernmental organization with the main goal of promoting comprehensive cooperation among

[1] What is the threat to Russia from the "Union of Turkic States" created by Ankara? Available at: https://news.rambler.ru/troops/47113017-chem-rossii-grozit-sozdavaemyy-ankaroy-soyuz-tyurkskih-gosudarstv/?ysclid=l9lgxp73h0270309235 (in Russian).

Turkic states. In the following years, the Council was able to institutionalize sectoral cooperation and establish subsidiary platforms such as the Parliamentary Assembly of Turkic States (TURKPA), the International Organization of Turkic Culture (TÜRKSOY), the International Turkic Academy and others. The final document of the Nakhchivan Summit expressed the aspiration of the Turkic states to promote peace, security and stability in the region and the world.

In November 2021, a historic summit was held in Istanbul. It marked the beginning of the third stage, during which the Turkic Council was transformed into the Organization of Turkic States (OTS). During the Summit, the Regulations on the Partners of the Organization of Turkic States were adopted. Using the potential of good neighborliness, solidarity and cooperation in the spirit of equality, mutual trust, mutual interest, mutual consultation and striving for development within the framework of cooperation became the main goal of the established organization. The concept of "Great Turan" envisages the unification of all Turkic-speaking peoples in a super-confederation (Gorokhov 2021). The structure is open to constructive cooperation with third countries and international organizations.

The most significant event after changing its name to the Organization of Turkic States was the adoption of the "Concept of the Turkic World until 2040." According to experts, if the countries manage to implement it by 2040, the integration of the Turkic world will be achieved. According to Professor Cengiz Tomar of the International Turkish-Kazakh University, "the document in question contains points that will ensure cooperation and unity of the Turkic world in all spheres" (Tomar 2021). The Ninth Summit of the OTS (2022) in Samarkand was held under the theme "A New Era for Turkic Civilization: Towards Common Development and Prosperity" and is of great significance in terms of the decisions taken and the latest messages.

The official languages of the OTS are Azerbaijani, Kazakh, Kyrgyz, and Turkish, with English as an additional language. As new members join, their languages will also become official languages of the Organization.

Some fifteen countries have expressed a desire to establish various forms of international economic cooperation with the organization, a testament to its reputation and growing international influence (History... 2021).

In addition to Turkey and the Central Asian states, the multinational Turkic world formally includes the Turkic populations of some subjects of the Russian Federation (Chuvashia, Bashkortostan, Tatarstan, Yakutia, the Republic of Crimea, Tyva, etc.), Gagauzia (an autonomous territorial entity within the Republic of Moldova), and the Xinjiang Uygur Autonomous Region of the People's Republic of China. The region is located in northwestern China, was established in 1955 and is home to approximately 3,640,000 Uyghurs. The Turkish Republic of Northern Cyprus (recognized only by the Organization of the Islamic Conference) is also considered a Turkic state (Museibov 2004).

The OTS was established to consolidate the peoples of Turkic-majority countries in order to strengthen mutually beneficial economic cooperation. Turkey plays the most active role in the operation of this regional international organization in the Eurasian space. The OTS represents the unity of a number of states on an ethnic basis, abandoned by many peoples with common ethno-cultural (Slavic, Germanic) and linguistic (Spanish, Portuguese, Persian, etc.) roots.

In addition to Turkey and Azerbaijan, the founding members of the OTS are Kazakhstan and Kyrgyzstan, members of another integration association, EAEU. Subsequently, other Central Asian states joined the organization. Uzbekistan became a full member in October 2019. Turkmenistan joined the organization at the summit in November 2021. Hungary and the partially recognized Turkish Republic of Northern Cyprus were granted observer member status.[2]

The most important role in the OTS is played by Turkey, which seeks to unite peoples around the idea of recreating the prototype of the Ottoman Empire–the "Turkic World"–in modern historical conditions. The "Turkic World" was originally conceived as the backbone of a more spatial community, Turan, which should be interpreted as the totality of the Ural and Altai ethnic groups–Finno-Ugric, Tungus-Manchurian, Turkic, Mongolian, and sometimes even Korean and Japanese. The latter are expected to be attracted to the Turkic World project, but this is probably a matter for the future.

In Turkey, since the Islamist Justice and Development Party (AKP) came to power, the question of establishing a collective armed force has been raised with apparent regularity, but as the second Karabakh war showed, only a military-political alliance between Turkey and Azerbaijan can become a reality. Although Turkish President Recep Erdogan has repeatedly said that he dreams of "the appearance on the map of six states of one nation" (Ivanov 2022).

The most important decision-making body in OTS states is the Council of Heads of State, which is chaired by the country holding the presidency (in alphabetical order). Other working bodies are the Council of Foreign Ministers, the Council of Elders, and the Committee of Senior Officials.

The foreign ministers of the member states meet regularly at summits to discuss issues of common interest. Informal meetings of OTS Foreign Ministers are held on the margins of the UN General Assembly.

The Committee of Senior Officials of the OTS is composed of senior officials from the foreign ministries and relevant government agencies of the member states. The Committee meets regularly, usually before meetings of the Council of Foreign Ministers. It is responsible for coordinating all Council activities, preparing official documents for signature, and doing the same for internal affairs matters. The Committee has met 30 times on a regular basis and 7 times on special occasions with a specific agenda.

Perspective of the Development of the OTS

With the aim of creating a Turkish identity, Turkey has initiated the establishment of a number of organizations, not only public, public-private but also private.

In order to develop and strengthen inter-parliamentary cooperation, the Parliamentary Assembly of the Turkic States (TURKPA) was established under the Istanbul Agreement on November 21, 2008. The organization's mission is to develop political dialogue among member states through parliamentary diplomacy, to harmonize national legislation among member states, and to strengthen joint activities,

[2] Turkish Cooperation and Coordination Agency (TİKA) // https://www.turkkon.org/en.

including expanding foreign economic relations, implementing joint business projects, and finding solutions to various economic issues facing the Turkic world.

An important milestone in the development of Turkic identity was the establishment of the International Organization of Turkic Culture (TÜRKSOY), which emerged from the 1992 meetings. The organization is an alliance of Turkic-speaking countries whose main purpose is "to establish cooperation among Turkic-speaking peoples for the preservation, development and transmission to future generations of the common material values and cultural monuments of the Turkic peoples." On May 3, 2023, an international round table "TÜRKSOY – 30 years: Results and Prospects" was held in the library of the First President of the Republic of Kazakhstan, organized jointly with the International Organization of Turkic Culture.[3]

A very special place in the organization of the Turkic world is occupied by the International Turkic Academy, which has been operating in Kazakhstan since 2010. During these years, close cooperation has been established with TÜRKSOY, TURKPA, Turkic Council, and IRCICA (Research Center for Islamic History, Art and Culture). Azerbaijan, Kazakhstan, Kyrgyzstan and Turkey are members of the Academy, while Hungary has observer status. The Academy is dedicated to research, publishing books and journals, organizing international forums and conferences with renowned scholars, and publishing scientific works on Turkology.[4]

The Union of Turkic Universities, founded in 2013, promotes various forms of cooperation between universities in the countries. The number of its member universities has increased from 14 to 22 between 2014 and today. The Union is involved in many activities, including Orhun Exchange Program, Union Spartakiade, and Student Council. As part of the development and implementation of these programs, five meetings at the level of rectors and vice-rectors and three general meetings have been organized since 2014. In 2019, during the Fourth General Assembly of the Union of Turkic Universities organized by Khoja Ahmed Yasawi International Kazakh-Turkish University (Ahmed Yasawi University), Gazi Turkish University, Nigde Ömer Halisdemir University, Cappadocia University and Szeged University of Hungary were accepted as new members of the Union.[5]

The Turkic Culture and Heritage Foundation, based in Baku, was established at the Summit of the Turkic Council in Bishkek in August 2012. The Foundation's activities focus on research, protection, propaganda, and promotion of the culture and heritage of Turkic-speaking peoples. In its work, the Foundation uses the experience of other Turkic-speaking and international organizations and establishes cooperation with them.[6]

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[3] TURKSOY - 30 years: results and prospects. Available at: https://dknews.kz/ru/politika/286994-tyurksoy-30-let-itogi-i-perspektivy (in Russian).

[4] Tokaev ratified the agreement on the conditions for hosting the Turkic Academy in Kazakhstan. Available at: https://informburo-kz.turbopages.org/informburo.kz/s/novosti/tokaev-ratificiroval-soglashenie-ob-usloviyah-razmesheniya-tyurkskoj-akademii-v- kazakhstan (in Russian).

[5] Union of Turkic Universities //https://www.turkkon.org/en/isbirligi-alanlari/education_4/turkic-university-union_14

[6] Turkic Culture and Heritage Foundation // https://www.trend.az/tags/45715/

The Turkic Business Council was established by special agreement on October 20, 2011 in Almaty. The aim of the Business Council is to initiate and monitor multilateral activities within the framework of international economic cooperation based on the principle of mutual assistance and support in accordance with the priorities described in the Agreement, and to institutionalize existing cooperation mechanisms in the field of mutual investment and trade. Six meetings and 10 international business forums have been held under the auspices of the Business Council, with the participation of more than 500 entrepreneurs. Technical visits for investors, round tables for entrepreneurs from member states and exchange programs between national chambers of commerce and industry have been organized.[7]

The Turkic Chamber of Commerce and Industry (TCCI), headquartered in Istanbul, was officially established in 2019 and consists of chambers of commerce and business communities of member and observer states. The TCCI is an important mechanism for international economic cooperation, as well as the implementation of sustainable business programs and projects to increase international trade performance among member states. A legal framework is also planned for the Trabzon Chamber of Commerce and Industry, which includes automotive and transport companies, in order to guide and embed its representatives in a permanent structure that will continuously work to further develop the international economic relations of the private sector of the Turkic world.

In the short time since its establishment, the TCCI has managed to organize large-scale business forums in Tashkent and Baku, with the participation of government officials and more than 500 businessmen. For example, in 2020, as part of the efforts of the Turkic Council countries, TCCI prepared proposals aimed at preventing undesirable consequences of the COVID-19 epidemic. The Kyrgyz Chamber of Commerce and Industry (KCCI) and the Union of Chambers and Commodity Exchanges of Turkey have agreed to cooperate on technical assistance to strengthen the KCCI. A large-scale business forum is being prepared.[8]

The education and culture sectors play an important role in this integration process. Specially created organizations such as the Turkish Cooperation and Coordination Agency, the International Organization of Turkic Culture, and the Yunus Emre Institute can be highlighted. The list of their activities and various programs is impressive: holding Pan-Turkic festivals, building mosques and hospitals, providing scholarships to students, developing unified textbooks in literature, geography, and history. At the same time, Turkey is consciously maintaining its reputation as a progressive, pro-Western state, thus shaping the world view of the younger generation of the Turkic population.

Turkey's involvement in areas such as trade and economics, transport and logistics is evident. Its involvement in the construction of pipeline routes, international motorways and railways is particularly significant. Turkey ensures the transit through its territory

[7] Turkic Business Council // https://www.turkkon.org/en/isbirligi-alanlari/economic-cooperation_2/turkic-business-council-and-business-forums_9

[8] Turkic countries have created new mechanisms for the growth of trade turnover // https://www.aa.com.tr/ru5

of all kinds of fuel and energy resources and various types of raw materials consumed by modern production to the countries of the Mediterranean basin and the EU. This serves the economic interests of East Asian countries such as China, South Asian countries such as India, as well as the countries of the South Caucasus and Central Asia, and is actively supported by Western European countries and the United States.

The OTS should be seen as Turkey's attempt to create a new alliance, an alternative to the Eurasian Economic Union. Over the next decade, OTS countries, with a combined population of 173 million, are expected to develop a market for investment, labor, goods and services.

A modern feature of the development of the OTS is Turkey's attempts to involve the Turkic states not only in foreign policy, but also in military-political activities. For example, the Turkish Foreign Minister has expressed the view that the Turkic countries are obliged to initiate the development of new military-political processes and not only to react to them. Thus, at present the issue of establishing a Turkish military base in Azerbaijan is pressing, further expansion of cooperation in the military-technical sphere is being discussed, military maneuvers and exercises are being planned. For about 10 years now, the idea of creating a separate internal armed forces organization with military status, subordinate to the Turkic Council, has been nurtured.

However, according to Kirill Semenov, an Orientalist and RIAC expert: "Turkey's ambitions are undoubted, but there is still no talk of a unified Turkic army" (Semenov 2022).

The OTS Summit in Uzbekistan in 2022 demonstrated the confidence of OTS member states in further strengthening and developing international cooperation not only in the economic sphere, but also in the cultural sphere, taking into account the language and folk traditions of the Turkic peoples.

Within the framework of the OTS, the Development Bank, the Turkic Investment Fund and an agreement on the simplification of customs procedures have been established. A venture capital initiative fund has been proposed to develop modern high technologies, digitalization, and education. The construction of the Uzbekistan – Kyrgyzstan – China and Termez – Mazar-i-Sharif – Kabul – Peshawar railways has been supported, which will significantly increase the capacity of the Baku – Tbilisi – Kars railway. There are plans to develop transport links between Europe and Asia and to diversify the infrastructure of the entire transport corridor.

In order to achieve closer coordination and cooperation on security issues, OTS member states have agreed to hold regular meetings to develop deeper defence industry and military relations.

Turkey's favorable strategic location as a transit country in the new East–West and North–South transport corridors makes it the main beneficiary, acquiring low-cost energy from Russia and Central Asian countries and advanced technologies from the EU. There is a chance for Turkey to receive preferential investment from China and, accordingly, some loyalty from the United States and the EU in developing its relations with the Central Asian countries.

However, there are still obstacles to the revival of the Turkic world. In Turkey, for example, Kurds make up a significant part of the population, more than

23%; in Kazakhstan, almost 20% of citizens are Russians, Kurds, Ukrainians, and representatives of other nationalities. In post-Soviet states, there are ethnic groups that have nothing to do with the Turkic group.

Central Asian states are very cautious about involving their countries in other foreign policy alliances. Moreover, their interests in the OTS are limited to trade and economic interaction, logistical solutions, and cooperation in the humanitarian sphere, including cultural and religious issues. The OTS has many intraregional problems with the Central Asian countries, with not only domestic political but also economic instability. There are also many problems in the social sector, with quite high levels of unemployment. Society is affected by interclan conflict and corruption, and there are real threats related to border security, drug trafficking, and Islamic radicalization. The Central Asian countries are in turmoil not only because of intrastate disputes over competition for energy and water resources, but also because of ongoing ethno-territorial incidents in Uzbekistan, Tajikistan, and Kyrgyzstan. According to experts, a serious external threat to the CA countries is the "Afghan factor," which could become a source of support for radical Islamism.

EAEU and OTS

Currently, two Eurasian alliances, the OTS and the EAEU, have been formed on vast territories and exist along the conventional border between Europe and Asia. Formally, the OTS is not an alliance, as the organization lacks the traditional formalization of relations. Of the EAEU members, Kazakhstan and Kyrgyzstan are present in the OTS, which is an important factor that can both generate contradictions and restrain any "sharp actions" of all EAEU and OTS participants.

Obviously, the prospects for interaction between the EAEU and the OTS will depend on Russian-Turkish relations, as Russia and Turkey are the largest countries in these organizations. Russia is the backbone of the EAEU, while Turkey dominates the OTS, both organizationally and in the production and military context. It should also be noted that Kazakhstan was one of the main initiators of Eurasian and Turkic integration. Since the establishment of the EAEU in 2015, the participation of the first persons of Kazakhstan and Kyrgyzstan in the summits of Turkic-speaking states has been constant.

In September 2015, the fifth summit of the Cooperation Council of Turkic-speaking states was attended by the President of Kyrgyzstan Almazbek Atambayev and the President of Kazakhstan Nursultan Nazarbayev. The sixth summit, held in September 2018, was attended by the President of Kazakhstan Nazarbayev and the President of Kyrgyzstan S. Jeenbekov. The seventh summit will be held in Baku in October 2019 and will be attended by the President of Kazakhstan N. Nazarbayev and the President of Kyrgyzstan Sooronbay Jeenbekov. The Istanbul Summit on November 12, 2021 has already been held with the participation of President of Kazakhstan Kassym-Jomart Tokayev and President of Kyrgyzstan Sadyr Zhaparov.

All the activities of the OTS indicate that Turkey is thoroughly and systematically trying to implement ideas to expand the scope of its own national idea of consolidation

of Turkic peoples and the penetration of the neo-Ottoman ideology, which is opposed to Eurasian culture, and thus trying to compete vigorously with Russia's integration initiative.

According to political scientist and expert Mikhail Burda, "the experience of the OTS could certainly be used within the framework of the Eurasian Economic Union. ... Unlike the Turkic world, where there are ethnic and religious forms of identity, the Eurasian partnership has practically no such ties. That is why there are no conditions for starting common processes within the framework of the EAEU" (Krek 2022).

According to experts, "Turkey is actively using the full arsenal of soft power weapons against Russia, including in the spheres of culture and education, as well as a vigorous presence in the Russian-language Internet space" (Avatkov and Badranov 2013). It also became noticeably active within Russia in the 1990s, immediately after the collapse of the USSR, in the midst of cultural, humanitarian and scientific projects. For example, the Assembly of Turkic Peoples was established in Tatarstan and actively promoted the separation of national autonomies from the Russian Federation. "Yakutia, Tatarstan, and Bashkiria openly claimed the status of national independent states, and Yakutia even prepared to create its own army and introduce a visa regime for other Russian citizens" (Gorokhov 2021).

Expert research suggests that it is Turkey that is proposing new ideas, if not to separate these autonomies from Russia, then at least to reach the borders of the post-Soviet Turkic republics. As an example, they cite the idea of creating a "Turkic corridor," for which part of the Orenburg region would be transferred to Tatarstan or Bashkiria, putting these republics directly on the border with the Kazakhs, "brothers in language and faith." "This is fully in line with the plans of the ideologists of the "Great Turan," who see as part of this empire not only the Turkic autonomies of the Russian Federation, but also the entire North Caucasus, Kalmykia, Crimea, Dagestan, Astrakhan, Volgograd, Kurgan, Rostov, Saratov, Samara, parts of the Sverdlovsk, Orenburg and Chelyabinsk regions, the Krasnodar, Krasnoyarsk and Stavropol territories, and almost all of Siberia" (Gorokhov 2021).

For Russia and consequently for the EAEU, the creation of the OTS represents a certain danger. If so far the emphasis has been on the cultural and humanitarian sphere, the new title is a step toward an even more binding structure, whose members could be bound by "operational decision-making mechanisms," as Turkish Foreign Minister Mevlut Cavusoglu stressed at the summit.[9] Asked why Turkey needs the organization's new status, Turkish political scientist Kerim Has replied: "Recep Erdogan is very interested in expanding 'Turkey's influence sphere. The easiest and most natural place to do this is in Central Asia, where Turkic peoples who are fraternal to the Turks live. Secondly, he needs as many leverage points as possible against Russia. By increasing its influence in the countries bordering Russia, Turkey will gain strong positions in any negotiations on all issues. The number of such issues is growing. For example, Syria and Libya, various economic projects, and the situation in the South Caucasus" (Gorokhov 2021).

[9] Savelyev, A., 2022. Will Erdogan succeed in Great Turan? Does Russia agree with this? Regnum, May 26. Available at: https://regnum.ru/news/polit/3602083.html (in Russian).

Although a number of Central Asian Turkic states are skeptical about the issue, the new position of the organization's members is not so much cultural as political. Especially as Turkey may soon have an ally in the OTS. It was President Erdogan who proposed to make the partially recognized Turkish Republic of Northern Cyprus a full member of the organization, which will automatically lead to its recognition by all OTS member states.

According to Aleksandr Savelyev, an Orientalist, advisor to the Russian National Economic Security Service (RNSEB) and member of the Council of Experts of the State Duma Committee on CIS Affairs, Eurasian Integration and Relations with Compatriots, "Russian officials' indulgence of Ankara's immense ambitions and nationalism, combined with Pan-Turkism in the former Soviet republics, may not only lead to the collapse of the already sluggish integration structures, but also create another hotbed of tension on Russia's borders... The time of empty phrases and complacency is over for Russia..." (Savelyev 2022).

According to some experts, Turkey, despite being the main bearer of the idea of ethno-geographical, cultural, economic, political and military unification, will inevitably clash with the interests of Russia and China. Russia, for its part, has already declared that the center of the Turkic world is in the Russian Altai, i.e. outside Turkey. According to Victor Nadein-Raevskiy, a senior researcher at the National Research Instituteof World Economy and International Relations, Russian Academy Of Sciences, "China's attitude to the consolidation of the Turkic world is categorically negative. Official Beijing has repeatedly complained about Turkey's 'interference in the affairs of others.' Ankara claims to be the defender of the interests of all Turks: both the Crimean Tatars and the inhabitants of China's Xinjiang Uygur Autonomous Region."[10]

According to Aleksey Chekryzhov, head of the department for the study of the world economy and Eurasian integration processes at the Berlek-Unity Center for Geopolitical Studies, "the inclusion of Russia, China, and even both countries in the OTS is still considered unlikely. Ankara can singlehandedly determine the vectors of development of the OTS based on its own interests, but the inclusion of Russia or China in this system would disrupt the status quo, and any decisions would have to be made based on the consensus of all parties. In this respect, a choice will have to be made between two vectors of the organization's development. The first is to ignore the Turkic peoples of Russia and China, which are 'disadvantageous' for Turkey. In this case, the organization will reach its maximum result rather quickly. The maximum will be expressed in joint cultural and humanitarian projects of the participating countries and in the increase of trade and economic cooperation. The second development option is based on rapprochement and integration of the project with Russia and China. In this case, Turkey will lose its hegemony, but will open the door to Greater Eurasia, taking into account the conjugation of the OTS with the SCO, the EAEU, and China's transport projects. Of course, such a scenario does not seem realistic today, but times are changing" (Chekryzhov 2022).

[10] Turkic NATO will become a problem for Russia and China. Available at: https://rosbalt-ru.turbopages.org/rosbalt.ru/s/world/2021/11/23/1932327.html (in Russian).

EAEU Trade and Economic Cooperation with the OTS

The OTS integration project, implemented by Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan (as well as Hungary and the Turkish Republic of Northern Cyprus as observers) together with Turkey, poses certain risks for the EAEU in general and Russia in particular. For example, Turkic-speaking CIS countries are taking advantage of various opportunities to increase their competitiveness and diversify their trade and economic relations, including through cooperation within the OTS. It is possible that the growing integration in the subregion will be used to weaken Russia's (and China's) political and economic influence.

In 2016, the value of EAEU's merchandise exports to OTS countries (Azerbaijan, Turkey, and Uzbekistan) decreased significantly from $26.8 billion in the previous year to $19.4 billion. In general, positive dynamics were observed in the second half of the 2010s up to and including 2019, when the indicator reached $32.8 billion. In 2020, it fell by 15.2% to $27.8 billion. In 2022, there was a sharp increase in merchandise exports from EAEU to OTS countries, up to $80 billion.

In 2015–2016, the value of the EAEU's merchandise imports from OTS countries decreased from $7.5 billion to $5.8 billion. In 2016-–2019, it steadily increased and in 2020 it decreased by 3.2%. In 2021–2022 imports were at $13.4 billion and $18.4 billion, respectively (see Figure 1, p. 98).

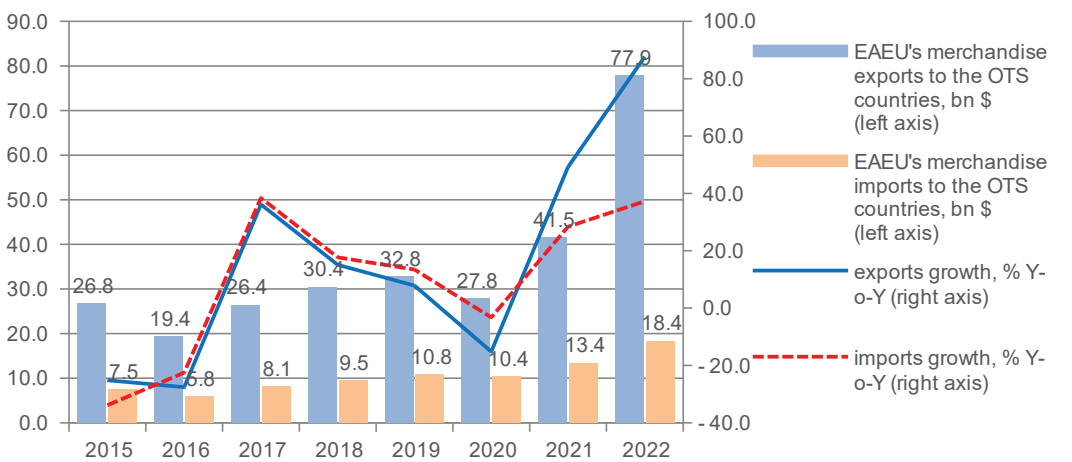

Figure 1. Dynamics of the EAEU's merchandise trade with the OTS countries[11]

Note: * - Excluding EAEU members (Kazakhstan and Kyrgyzstan) within the OTS.
Sources: EEC, ITC Trade Map.

The EAEU's merchandise exports to OTS countries are based on fuel and energy products, metals and metal products, food and agricultural raw materials. The EAEU's imports from the OTS countries largely constitute agricultural products, textiles, textile

[11] Compiled using data from national statistical agencies and IMF data // https://www.imf.org/

products and footwear, as well as chemical products, machinery, equipment and vehicles (see Table 1, p. 99).

Table 1. Commodity structure of the EAEU's foreign trade with the OTS countries in 2015, 2019 and 2022 (in % of the total)[12]

HS codes	Commodity group	EAEU's exports to OTS countries			EAEU's imports from OTS countries		
		2015	2019	2022	2015	2019	2022
01-24	Foodstuffs and agricultural raw materials (except textile)	12.5	14.1	12.1	30.9	26.8	22.1
25-27	Mineral products	21.4	35.2	61.0	5.6	4.0	3.7
27	Fuel and energy products	20.6	33.9	60.2	4.4	2.7	2.8
28-40	Chemical industry products, rubber	5.0	5.3	4.5	10.9	12.0	15.1
41-43	Raw leather, fur and fur products	0.0	0.0	0.0	0.7	0.6	0.5
44-49	Wood and pulp and paper products	3.1	3.2	2.6	1.2	0.8	1.5
50-67	Textiles, textile products and footwear	0.3	0.4	0.2	19.5	23.9	22.4
71	Precious stones, metals and their products	0.1	0.2	1.3	0.5	0.3	0,5
72-83	Metals and metal products	21.7	16.7	14.8	6.1	6.6	6.7
84-85	Machinery and equipment	2.0	4.5	2.0	12.5	12.4	17.5
86-89	Transport vehicles	1.9	2.7	0.9	5.5	8.3	6.2
90-92	Technical tools and apparatus	0.2	0.4	0.1	0.9	0.4	0.5
68-70, 93-97, 99	Other goods	31.8	17.2	0.4	5.8	4.0	3.3

Note: * - Excluding EAEU members (Kazakhstan and Kyrgyzstan) within the OTS.

Sources: ITC Trade Map.

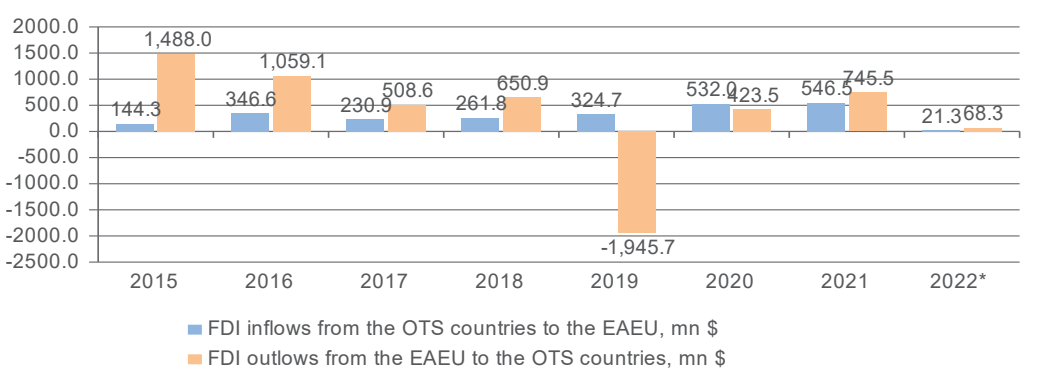

Figure 2. EAEU – OTS investment interaction in 2015–2022 (FDI flows)

Notes: * - excluding data on Russia; ** - excluding EAEU members (Kazakhstan and Kyrgyzstan) within the OTS.

Source: EEC[13].

[12] Compiled using data from national statistical agencies and IMF data // https://www.imf.org/

[13] Eurasian Economic Commission. Department of Statistics // https://eec.eaeunion.org/commission/department/dep_stat/tradestat/analytics/

According to the Eurasian Economic Commission (EEC) data, inflows of FDI from the OTS countries to the EAEU peaked in 2020, when they value exceeded $0.5 billion. The FDI outflows from the EAEU to OTS countries were significant in 2015–2016, amounting to $1.5 billion and $1.1 billion, respectively (see Figure 2, p. 99).

FDI inward stock in the EAEU from the OTS countries increased from $1.5 billion in 2015 to $5.3 billion in 2021, while accumulated FDI outflows from the EAEU to OTS countries changed from $7.9 billion to $7.8 billion. In 2022, excluding data for Kyrgyzstan and Russia, the values of these indicators were $1.8 billion and $0.5 billion, respectively (see Figure 3, p. 100).

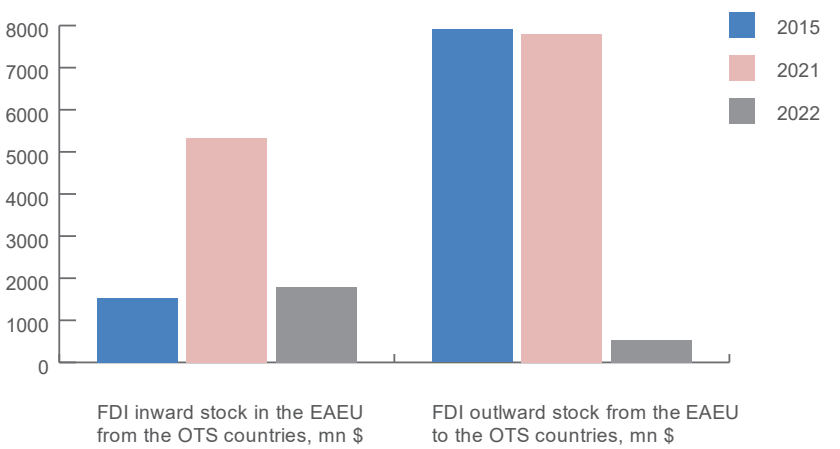

Figure 3. EAEU – OTS investment interaction in 2015–2022 (FDI stock)

Notes: * - excluding data for Kyrgyzstan (in 2022, excluding data for Kyrgyzstan and Russia); ** -excluding EAEU members (Kazakhstan and Kyrgyzstan) in the OTS.

Source: IMF.[14]

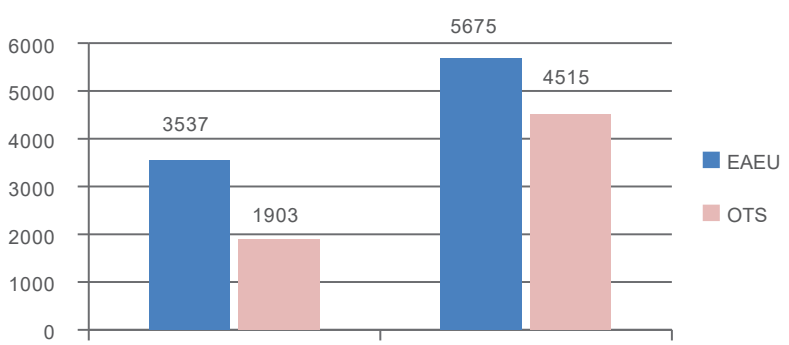

Figure 4. GDP (PPP) of EAEU and OTS countries in 2010 and 2022, in $ billion[15]

Source: IMF.

[14] Eurasian Economic Commission. Department of Statistics // https://eec.eaeunion.org/commission/department/dep_stat/tradestat/analytics/

[15] Compiled by the authors using data from national statistical agencies and IMF data // https://www.imf.org/

The size of the OTS member states' economy has grown significantly. Between 2010 and 2022, their aggregate GDP in PPP terms increased from $1.9 trillion to $4.5 trillion. In relation to the EAEU's GDP the indicator increased from 54% to 80%, i.e. there is a noticeable convergence of the economic potentials of the two integration associations (see Figure 4, p. 100).

The trade and economic potential of the OTS is primarily shaped by the leading player in the subregion, Turkey. Thanks to structural reforms implemented since the early 2000s, accompanied by large-scale domestic investment in infrastructure and qualitative restructuring of industry, an improved domestic investment climate, and increased external borrowing, Turkey has leapfrogged its socio-economic development. Over the past decade, the Turkish economy has been one of the fastest growing in the world, significantly outpacing the growth rate of the Russian economy. Over the period 2010–2022, Turkey's average GDP growth rate was 6.0% per year, while Russia's was 1.7% (see Figure 5, p. 101). For all their objective differences, the Russian and Turkish economies are becoming comparable. Turkey is rightly claiming the role of a geopolitical leader in the Middle East region, drawing the countries of the South Caucasus and Central Asia into its sphere of economic interest.

Figure 5. Russia's and Turkey's real GDP growth rates, 2010–2023, in % to previous year[16]

Note: * – IMF forecast.

Source: Rosstat and IMF.

The OTS is preparing to launch its Investment Fund to provide financial support to small and medium-sized enterprises in the Turkic-speaking states. The establishment of the fund was first considered by the OTS economy ministers in Baku in 2012. The fund's activities will help boost investment in the region, including the expansion of Turkey's capital into the Turkic-speaking CIS countries with relatively low-cost labor force.

[16] Compiled by the authors using data from national statistical agencies and IMF data // https://www.imf.org/

So far, the level of investment cooperation between 'Turkey and these countries is insignificant. For example, as of April 1, 2023, the Turkey's accumulated investment in Kazakhstan amounted to $1.74 billion or only 0.7% Kazakhstan's FDI inward stock.[17]

In December 2022, the customs services of the two countries successfully carried out a multimodal eTIR shipment by an Uzbek carrier from Uzbekistan (customs post Ark Buloq/Aviayuklar) to Azerbaijan (customs post Baku Airport/Baku Cargo Terminal) using the eTIR electronic guarantee on the UNECE platform. Earlier, a "digital TIR" project between Kazakhstan and Uzbekistan was launched under the OTS in cooperation with the International Road Transport Union (IRU) and extended to Kyrgyzstan in March 2022. All this demonstrates the member states' commitment to practical cooperation and to promoting the digitalization of transport and transit procedures.

In order to facilitate the exchange of information not only on the movement of vehicles, but also on the movement of goods, the customs structures of the OTS member states signed an agreement "On the establishment of a simplified customs corridor between the governments of the Organization of Turkic States" at the Samarkand Summit in 2022.

Through transport communications, there are opportunities to organize a direct route for the transit of goods from Europe to China and vice versa through the territories of the OTS countries, which can compete with some projects on the formation of transport corridors in the Eurasia space.

OTS countries are actively continuing joint activities to strengthen regional integration through simplification, modernization, standardization and harmonization of customs procedures, further application of digital tools in customs, exchange of best practices and implementation of capacity building programs in areas of mutual interest. It is planned to continue the implementation of the Caravanserai project, which will enhance the competitiveness and attractiveness of the Trans-Caspian International Middle East–West Corridor by ensuring the smooth operation of customs and border crossing points.

Conclusions

In conclusion, the interaction between the Turkic-speaking states has developed quite successfully over the past thirty years. The OTS seeks to participate actively in both the economic and other spheres of activity of the CA countries. The organization is becoming a serious competitor to the EAEU, the CSTO and the SCO, which goes against the interests of Eurasian economic integration and, first and foremost, Russia. The influence of the OTS on the CA countries and the competition between the EAEU and the OTS can be expected to grow. The OTS is capable of countering the foreign economic interests of the EAEU with its own economic interests, but it is unlikely to be able to withstand such competition, mainly because the economic ties between the EAEU countries, such as Kazakhstan and Kyrgyzstan, are in many respects much deeper with Russia than with the other OTS countries. The deepening integration of the OTS and the strengthening of Turkish

[17] National Bank of Kazakhstan, section "Statistics of the external sector - International investment position" // https://www.nationalbank.kz/ru/news/mezhdunarodnaya-investicionnaya-poziciya

influence in the CA countries may lead to a conflict of integration processes of these countries in the EAEU. At the same time, contradictions arising from the membership of the OTS states in other blocs are unlikely. Strengthening trade and economic relations between OTS member states through the use of the simplified customs corridor and transit potential remains a serious risk for the prospects of Eurasian integration.

However, the OTS and the EAEU can find common ground and fruitfully cooperate on many issues, both economic and political. It is important to find a certain balance of interests between the OTS and the EAEU in the system of organizing customs regulation and foreign economic activity in general, and possibly in politics in the future. All this requires regular negotiations between the participants of the two organizations in a full format in order to reconcile the foreign economic interests of each member state. The ongoing integration processes in the OTS raise the question for the EAEU of the advisability of creating a unified program to ensure economic security in order to reduce emerging risks.

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Russia's Economic Cooperation with Latin America in the Context of Global Economic Transformations

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For citation: Yakovlev, Petr, 2023. Russia's Economic Cooperation with Latin America in the Context of Global Economic Transformations. *Contemporary World Economy,* Vol. 1, No 2.

DOI: https://doi.org/10.17323/2949-5776-2023-1-2-112-132

Keywords: Russia and Latin America in the global economy, Russian-Latin American trade, Russian business in Latin American markets under new conditions.

The article was prepared with the financial support of the Russian Science Foundation under the research grant project No 22-28-01298 "Promotion of Russian high-value-added products to the markets of Latin American countries: opportunities and risks of the post-COVID period."

Abstract

The financial, economic and trade break between the Russian Federation and the West should stimulate national business activity in Latin America in line with the general foreign economic turn to the Global South. The task of intensifying relations with Latin America (or Latin-Caribbean America, LCA) is on the agenda, but the unprecedented sharpness of the conflict between Russia and the West has had heterogeneous consequences, in some cases narrowing the corridor of opportunities for increasing economic exchanges between Russia and LCA states. The essence of the problem is that the systemic trade and financial restrictions imposed by the West have led to the imbalance of the international raw materials and food markets, disrupted logistics chains and, in some areas, put

Russia and Latin American countries in a difficult trade and economic situation. However, in the author's opinion, even in this crisis situation there is room not only for maintaining the achieved level of Russian-Latin American cooperation, but also for building mutually beneficial trade and economic relations in new technological sectors.

Introduction

The formation of an actual agenda for the development of Russian-Latin American business relations at the stage of global transformations and in the conditions of international turbulence presupposes the answer to two essential questions. First, does Russia have real opportunities to promote its economic interests in Latin America? And second, is it necessary to do so now, given our difficult geopolitical situation and the transitional state of the Russian economy, which needs to be radically restructured and reintegrated into the system of world economic relations?

The answer to the second question can only be in the affirmative, because without effective relations with Latin American states, which represent a large segment of the world economy and trade, the Russian Federation will not be a full-fledged international trade and economic entity. All the more so, because in the Global South, to which the LCA belongs, this region is the closest to us in terms of civilization and culture, and its peoples speak relatively familiar foreign languages. In addition, many of our compatriots, descendants of several waves of emigration, live in a number of Latin American countries. All this potentially facilitates the establishment of business relations.

The answer to the first question is more complex and requires a comprehensive analysis of the development trends in Latin American countries, their positioning in the dynamically changing system of global economic relations and, most importantly, a clear idea of which of the emerging macroeconomic trends in the region correlate with Russian interests and opportunities and can be used to strengthen Russia's position in the external circuit. In fact, such a task is laid down in the new Foreign Policy Concept of the Russian Federation, which expresses our country's intention to develop relations with Latin American states "on a pragmatic, deideologized, and mutually beneficial basis, giving priority to the expansion of mutual trade and the development of other forms of economic cooperation" (The Concept 2023).

Russian-Latin American Relations: Achievements and Missed Opportunities

The collapse of the USSR ushered in a long period of dormancy in Russia's relations with Latin America. Trade and economic relations with even the closest partners were curtailed or suspended, including Moscow's long-standing key strategic ally, the Republic of Cuba. And it was only in the first decade of the 21st century that cooperation with the Latin American region returned to the agenda of domestic diplomacy, took an independent place in it, and became a "self-evident direction of Moscow's foreign policy" (Shchetinin 2019:

42). Moreover, Russia's interstate relations with a number of Latin American countries (Argentina, Brazil, Bolivia, Venezuela, etc.) began to expand rapidly, reaching the level of strategic partnership, which was perceived in the region and beyond as a strong sign of the Russian state's growing global political and economic weight (Davydov 2016).

It was in the first decade and a half of this century that the volume of Russian-Latin American trade grew at its maximum rate, increasing from $6.6 billion in 2003 to $17.6 billion in 2014, i.e., by 2.7 times.[1] At the same time, a commodity structure of exports and imports was formed, which has largely been preserved. The main items of Russian exports to the region were agricultural fertilizers and min0eral fuels (oil and oil products), which accounted for 63.9% of all deliveries to the region in 2014. Meat products, fruits (mainly bananas), and oilseeds were the main items of Russian imports. These three commodity groups accounted for 63.8% of all purchases in the LCA. Therefore, both Russian exports to Latin America and imports from the region were poorly diversified and dependent on a few types of raw materials and food products (see Table 1, p. 108).

Table 1. Dynamics and commodity structure of Russia's trade with LCA in 2003-2014 ($ million)

TN code FEA	Exports	2003	Share in %	2014	Share in %
	Total	**4183**	**100.0**	**9404**	**100.0**
These include:					
31	Fertilizers	791	18.9	3264	34.7
27	Mineral fuels	2858	68.3	2743	29.2
72	Iron and steel	178	4.3	797	8.5
76	Aluminium and articles thereof	33	0.8	516	5.5
40	Rubber and attiles thereof	21	0.5	206	2.2
	Top 5 export commodities	3881	92.8	7526	80.1
TN code FEA	**Imports**	**2003**	**Share in %**	**2014**	**Share in %**
	Total	**2419**	**100.0**	**8204**	**100.0**
These include:					
02	Meat and edible meat offal	640	26.5	3507	42.8
08	Edible fruit and nuts	367	15.2	925	11.3
12	Oil seeds and oleaginous fruits	-	-	795	9.7
17	Sugar and sugar confectionery	919	38.0	592	7.2
03	Fish and crustaceans	13	0.5	473	5.8
	Top 5 imported goods	1939	80.2	6292	76.8

Source: ITC. Trade Map. Trade statistics for international business development. Bilateral trade between Russian Federation and Latin America and the Caribbean. - https://www.trademap.org/Bilateral_TS.aspx?nvpm=

[1] Since Russia's foreign trade statistics are "restricted" since 2022, the author uses mirrored data from Latin American countries provided by the International Trade Center (ITC). These data may differ slightly from the existing Russian estimates, but they do not change the overall situation.

This circumstance became a kind of "trademark" of Russian-Latin American trade, which in the following years determined its unstable, unstable nature, subject to significant market fluctuations. Particularly noticeable fluctuations in the volume of mutual trade were observed in 2015–2021 as a result of the increased volatility of world prices for the main Russian and Latin American export goods (oil and oil products, food, agricultural raw materials), as well as the effects of the global financial crisis, which were destructive for international trade relations. As a result, the trade turnover between Russia and LCA in pandemic 2020 was 43.2% lower than in 2014 ($10.6 billion and $17.6 billion, respectively) (Yakovlev 2021).

Table 2. Dynamics and commodity structure of Russia's trade with LCA in 2015-2021 ($ million)

TN code FEA	Exports	2015	Share in %	2021	Share in %
	Total	**7047**	**100.0**	**12303**	**100.0**
These include:					
31	Fertilizers	2415	34.3	5582	45,4
72	Iron and steel	559	7.9	2209	18,0
27	Mineral fuels	1427	20.3	1889	15,4
76	Aluminium and articles thereof	656	9.3	496	4,0
30	Pharmaceutical products	-	-	343	2,8
	Top 5 export commodities	5057	71.8	10519	85.5

TN code FEA	Imports	2015	Share in %	2021	Share in %
	Total	**5670**	**100.0**	**5139**	**100.0**
These include:					
08	Edible fruit and nuts	874	15.4	1083	21,1
12	Oil seeds and oleaginous fruits	666	11.8	608	11,8
03	Fish and crustaceans	359	6.3	570	11,1
02	Meat and edible meat offal	1959	34.6	537	10,5
87	Motor vehicles and spare parts	105	1.9	359	7,0
	Top 5 imported goods	3963	70.0	3157	61.5

Source: ITC. Trade Map. Trade statistics for international business development. Bilateral trade between Russian Federation and Latin America and the Caribbean. - https://www.trademap.org/Bilateral_TS.aspx?nvpm=

To be fair, it should be noted that the recovery of the precrisis volume of Russian-Latin American trade occurred quite quickly, already in 2021, when the trade turnover increased to almost the maximum value of $17.4 billion. At the same time, there were some changes in the sectoral structure of trade turnover compared to the mid-2010s. The share of agricultural fertilizers and ferrous metals in Russian exports has increased, and

the share of oil and oil products has decreased slightly, although in absolute terms the volume of mineral fuel supplies to Latin America has increased significantly (by 32.4% in 2021 compared to 2015). In addition, in 2021, for the first time in the history of our trade relations, Russia exported pharmaceutical products to Latin American countries in relatively large volumes (in the amount of more than $340 million).

In turn, some transformations took place in the structure of supplies of LCA countries to the Russian market. In particular, the sharp decrease in Latin American exports of meat and meat products to Russia (a 3.6-fold decrease between 2015 and 2021) and a more than threefold increase in supplies of automobiles and auto parts (from $105 million to $359 million) are noteworthy. The volume of exports of other important Latin American commodities (fruits, oilseeds, fish products) to Russia did not change significantly and remained practically at the same level (see Table 2, p. 109).

All the noted changes in the commodity structure of Russian-Latin American trade had a strong macroeconomic rationale. In particular, the growth of exports of agricultural fertilizers to LCA was due to the rapid development of agricultural production in a number of Latin American countries, led by Brazil, which in a historically short period of time took one of the leading positions in the list of world exporters of food products. It can be noted that the expansion of the sales funnel of Russian potash, nitrogen, and mixed fertilizers (the main exporting companies: Eurochem, Uralkali, PhosAgro) played an important role in Brazil's transformation into an "agricultural superpower" (Paulon Girardi 2022). In turn, the increase in domestic exports of ferrous metals was dictated by the growing needs of manufacturing industries in some LCA countries, especially Mexico, while the breakthrough of Russian pharmaceutical products (mainly COVID-19 vaccines) in the Latin American market was a notable contribution to the efforts of the region's states to combat the coronavirus pandemic.

At the same time, the dynamic growth of Russia's own production of many food products has led to a radical reduction in imports of meat products from Latin America, but at the same time the growth of consumer demand for personal transportation has led to an increase in imports of cars and car parts.

A negative phenomenon for our trade with LCA was a peculiar change in trends: If in 2003–2014 there was a limited diversification of Russian exports to Latin America (the share of the top 5 goods decreased from 92.8% to 80.1%), in 2015–2021 the opposite process was observed: the share of the top 5 export goods increased from 71.8% to 85.5% (see Tables 1 and 2, pp. 108, 109). The alarming fact is that the list of the main items of domestic exports to Latin American countries does not include industrial products of high value-added sectors. This situation, as shown by special studies, was explained by two main factors: the relatively low activity of a small number of Russian technology companies in LCA in general, and the growing competition from companies of both traditional economic players in Latin American markets–the United States, Canada and Western Europe, and new, particularly assertive business structures of Asian countries: China, South Korea, India, Turkey, which aggressively promote industrial products in the region (Yakovlev 2017).

China has become one of the dominant players in the Latin American trade and economic space. In 2001–2022, the trade turnover of Latin American countries with the

PRC grew by more than 30 (!) times, while the similar indicator for the European Union was 3.4 times, and for the United States was three times. Accordingly, China's share in LAC's foreign trade increased sharply, while the shares of the U.S. and the EU decreased significantly (see Table 3, p. 111).

Table 3. LAC trade turnover with major partners (billion USD)

Year	Total		United States		EU-27		China	
	Volume	Share in %	Volume	Share in %	Volume	Share in %	Volume	Share in %
2001	606	100.0	359	59.2	87	14.6	16	2.6
2010	1757	100.0	617	35.1	208	11.8	193	11.0
2020	1838	100.0	693	37.7	193	10.5	307	16.7
2021	2429	100.0	877	36.1	244	10.1	430	17.7
2022	2889	100.0	1059	36.7	291	10.1	484	16.8

Source: ITC. Trade Map. Trade statistics for international business development. Bilateral trade between Latin America and Caribbean and China // https://www.trademap.org/Bilateral_TS.aspx?nvpm=

It should be noted, however, that the increase in trade with the United States was largely due to Mexico, which is economically linked to Washington within the framework of North American integration and accounts for around 70% of total U.S. trade with LAC ($718 billion out of $1,059 billion in 2022). U.S. trade with the rest of Latin America has either grown relatively slowly or stagnated. As a result, for a number of countries in the region, notably Brazil, Argentina, Peru and Chile, China has become the most important trading partner and, more importantly, the principal buyer of their goods. For example, in the first half of 2023, the Chinese market absorbed almost 38% of Chilean exports, while the American market absorbed only 17% (America Economia, 2023b).

But this is not just (and not so much) a matter of a surge in Sino-Latin American trade relations. China's expansion has taken a variety of forms, touching all key sectors of the LAC economy and relying on a solid financial base. Between 2005 and 2021, Chinese banks are reported to have lent $139 billion to governments in the region, facilitating the accession of 21 Latin American countries to the One Belt, One Road initiative. Under this program, Chinese companies have invested billions of dollars in the Latin American economy ($120 billion between 2013 and 2022), significantly outpacing competitors in a number of priority areas. Chinese companies have shown particular interest in gaining control of technologically advanced manufacturing industries and access to the region's energy and natural resources. For example, by the end of 2022, Power China State Corporation had more than 50 projects in 15 countries, including the construction of the largest wind and solar power plants in the region (The Economist, 2023d).

The sheer scale and broad sectoral diversification of their activities in Latin America and the Caribbean suggest that Chinese companies have become a powerful driver of the internal development of the Latin American economy.

Unlike China, the bottleneck in Russia's economic interaction with Latin America has been the low level of direct investment, the real volume of which cannot be accurately assessed for many reasons, including the fragmentation, inconsistency and "closure" of the available statistics. This circumstance underscores the importance of scientific analyses using original and justified research methods, which allow us to come as close as possible to understanding the real state of affairs in the sphere of foreign investments of Russian companies (Kuznetsov 2018).

The lack of large-scale capital investments of domestic companies in Latin America and the Caribbean was and remains one of the main obstacles to the expansion of Russian-Latin American economic cooperation, the practical implementation of the goals and objectives of the declared strategic partnership. This issue has been studied in depth in the works of A.V. Kuznetsov, the content of which allows us to formulate a number of main theses explaining the absence of large-scale Russian production investments in the region (Kuznetsov 2022).

First, the fact that Latin America did not become the economic space in which the majority of leading Russian TNCs expanded their activities, including the acquisition of large industrial or extractive assets, had a negative impact. This distinguishes the region from Europe, the U.S. and even Africa.

Second, almost all investment projects of Russian companies in Latin America and the Caribbean were of a "focal nature" and poorly linked to the basic tasks of modernizing Latin American economies, and therefore did not receive adequate support from government agencies and the local business community.

Third, we cannot ignore the intense competition in Latin American markets already mentioned, which, because of the increased number of participants and its intensity, stands out against the background of other parts of the Global South. An example is the competition that our company (and, in parentheses, U.S. companies) lost to Chinese companies for the $8.3 billion contract to build the Atucha III NPP in Argentina (Penelli 2023).

This and a number of other factors have led to a narrowing of the scope of Russian-Latin American economic interaction, to the point where almost the only synthetic indicator of the dynamics of business cooperation between the Russian and Latin American business communities is the change in the volume of trade turnover. With this baggage, Russia and Latin America approached the beginning of profound transformations in the world economy and international trade, which directly affected (albeit in different modalities) not only Russian, but also Latin American interests.

Latin America and Nodes of Geoeconomic Tension

The recovery from the coronavirus crisis in 2021, followed by the geo-economic turmoil of 2022, are the starting points of a new global economic era. In Latin America, this period is characterized by the rebalancing of the economic model and the emergence of high-growth sectors. Without claiming to be exhaustive in our analysis, we would like to highlight some key development megatrends that have emerged in response to the macroeconomic stress nodes (points) of the Latin American region, which are similar to

those of the Russian Federation, but above all have commercial and economic significance for our country.

In our opinion, the following regional phenomena and trends can be attributed to the main "nodes of tension," the "unravelling" of which is a strategic task for Latin American states:

First, the low economic growth rates characteristic of Latin America and the Caribbean and the Russian Federation, which have almost always been lower than the world average since 2005, especially when compared with the GDP growth dynamics of Asian developing countries. In the period 2015–2023, this gap has become, without exaggeration, dramatic (see Table 4, p. 113). Therefore, one of the main macroeconomic challenges for Latin America and Russia is to radically accelerate economic development and quantitatively increase the "national economic weight."

Table 4. GDP growth dynamics (change in %)

Region, country	2005–2014	2015–2019	2020	2021	2022	2023	2024
World at large	3.9	3.4	-2.8	6.3	3.4	2.8	3.0
Developed countries	1.5	2.1	-4.2	5.4	2.7	1.3	1.4
Developing countries	6.1	4.4	-1.8	6.9	4.0	3.9	4.2
These include:							
Asia	8.3	6.4	-0.5	7.5	4.4	5.3	5.1
Sub-Saharan Africa	5.5	2.8	-1.7	4.8	3.9	3.6	4.2
Middle East	4.5	2.8	-2.7	4.6	5.3	2.9	3.5
Latin America	***3.5***	***0.8***	***-6.8***	***7.0***	***4.0***	***1.6***	***2.2***
Europe	3.7	2.6	-1.6	7.3	0.8	1.2	2.5
Russian Federation	***3.6***	***1.0***	***-2.7***	***5.6***	***-2.1***	***0.7***	***1.3***

Source: IMF. 2023. World Economic Outlook: A Rocky Recovery. Washington, DC: International Monetary Fund, Publication Services, April 2023. P. 142, 146 (2023 and 2024 - forecast).

The issue of improving the quality of economic systems through structural and technological modernisation is all the more acute in the context of the geo-economic changes that are taking place, some of which are having a negative impact, highlighting the challenges inherent in the Latin American economy and requiring the maximum mobilisation of the resources available to the countries of the region.

These include increased volatility in global commodity and food prices and a generally unbalanced external environment, fuelled by various protectionist and sanction measures adopted by Western countries. For example, Buenos Aires is lobbying the WTO to remove the discriminatory (in fact, prohibitive) tariffs of around 80% imposed by Washington on Argentine steel pipes (Página.12 2023). There are also gaps in global value chains and disruptions in traditional logistics routes, particularly in trade with Russia. In this context, Latin American experts point to the fragmentation of the unified organism of the world economy and stress the importance for the countries of the region

to develop business relations based on the principles of nearshoring (cooperation with neighbouring countries) and friendshoring (interaction with friendly states), which correlates with Moscow's stance (Cabrera Fuster 2023).

It should be noted that in Latin America and the Caribbean, economic cooperation based on the principles of nearshoring takes a variety of forms and involves virtually all key sectors of the economy, including the crucial energy infrastructure. One example is the agreement between Peru and Ecuador for the joint construction of a 550 km international high-voltage power line, which will allow a more rational use of energy resources between the two countries and strengthen their economic links (America Economia 2023a).

Since Luiz Inácio Lula da Silva's return to office (January 1, 2023), Brazil has been actively pursuing nearshoring (with other Latin American countries) and friendshoring (with extraregional states of the Global South) foreign economic relations. His policy is developing simultaneously on several fronts: the revival of Latin American integration groupings that have lost their effectiveness, in particular Mercosur (Argentina, Brazil, Paraguay and Uruguay); the conclusion of an "ambitious" free trade agreement with Mexico, which, when it comes into force, will mark a decisive step towards convergence between the two largest LAC economies (their combined GDP exceeds USD 3.7 trillion); negotiations with Indonesia and Vietnam to sign the Treaty of Integrated Economic Association (Lado 2023).

An important new element in contemporary Latin American integration policy is the growing involvement of local Latin American TNCs, the so-called multilatinas, whose number has increased dramatically in recent decades, along with the importance of their role in the LAC economy. It has become common for Brazilian, Colombian or Peruvian TNCs, for example, to venture into the markets of neighbouring countries, selling a significant part of their products and creating productive assets. For example, the Mexican industrial conglomerate Alfa Group is firmly established in Argentina, Brazil, Peru, Chile, Ecuador, the Dominican Republic and all five Central American countries. The multilatinas factor, according to international experts, has become one of the main supporting structures of Latin American integration at the current stage of its development (Duarte, Arvizu, Arriagada 2022).

The results of Iranian President Ebrahim Raisi's trip to Venezuela, Nicaragua and Cuba in mid-June 2023 are an example of an attempt to build cooperation on the principles of friendshoring. In Caracas, the Iranian leader signed 25 agreements on cooperation in key economic sectors such as oil production and refining, petrochemicals, natural gas production, agriculture, and foreign trade. Their implementation, E. Raisi and Nicolas Maduro claim, will increase Venezuelan-Iranian trade turnover from $3 billion in 2023 to $10 billion in the "near future." Mr Raisi stressed the "special nature" of cooperation between Tehran and Caracas, saying that these two countries of the Global South are "friends in difficult times" and that they are "united not by ordinary diplomatic relations but by strategic interests" (America Economia 2023d).

Another "knot of macroeconomic tension" has formed in the energy sector of the world economy, which is in the process of transformation, particularly in the context of Russia's confrontation with the West.

Latin America occupies a unique place on the global energy map for a number of important reasons. First, it is a region that has traditionally had significant hydrocarbon reserves (in different years, Venezuela and Mexico have been among the largest oil-producing countries). Currently, the most intense production growth is taking place in Argentina, at Vaca Muerta ('Dead Cow'), one of the world's largest unconventional (shale) oil and gas fields, and in Brazil, Guyana and Suriname, on the offshore shelf. In particular, oil production from Vaca Muerta is expected to exceed 1 million barrels per day by 2030 (Rystad Energy 2023), while the ultra-deep pre-salt oil and gas discoveries off the Brazilian coast in 2022-2023 (about 4.5 billion barrels of oil equivalent) are comparable to new fields in Qatar and Saudi Arabia (The Economist 2023b).

Guyana, a new petrostate, has made an impressive breakthrough in oil production. Its production of "black gold" is expected to rise to 1.2 million barrels a day by 2028 (1.1% of the world total), making this South American country of 800,000 the world's leading producer of oil per capita. As the British weekly The Economist reports, this prospect has put an end to a situation in which "foreign leaders had difficulty finding Guyana on a geographical map," as evidenced by the visit of U.S. Secretary of State Anthony Blinken to Georgetown at the beginning of July 2023 (The Economist 2023a).

At the same time, in response to the challenges of geo-economic transformation, countries in the region are showing a growing interest in renewable and alternative energy sources. At the beginning of the third decade of the 21st century, renewable energy already represented more than 33% of primary energy production in Latin America and the Caribbean, compared to a global average of only 13%. The region's electricity generation capacity will increase by 23.6 GW in 2022, of which 81% will come from renewable sources (wind, solar, photovoltaic, biomass, etc.) (Panorama energético 2022: 9).

At the same time, a number of Latin American countries, most notably Chile, see the future of their energy sector in the accelerated development of green hydrogen production. Taking advantage of the extremely favourable natural conditions in the central and southern regions of Chile (extremely high temperatures in the Atacama Desert and constant strong winds in the south), the political establishment and the business community in this country consider the production and export of green hydrogen as one of the main development directions, not only for the energy sector, but for the entire Chilean economy. In essence, this means the creation of a new economic sector geared to meeting a growing global demand. To this end, the Chilean authorities have promoted public-private partnerships in green energy, attracted foreign investment and secured a $1 billion credit line from the Inter-American Development Bank (IDB) (BID 2023).

Progress in the energy sector in Latin America and the Caribbean is structurally linked to the effects of another commodity rally—the growth in international demand for a number of mining commodities, most notably lithium ("white gold"), whose prices have experienced a pronounced bull run in recent years. The explanation for this phenomenon is simple: Lithium is critical to the booming production of many innovative products, from mobile gadgets to electric cars. Given that (according to estimates) around 55-60% of the world's reserves of "white gold" are concentrated in the so-called "lithium triangle"—the neighboring territories of Argentina, Bolivia and Chile—The Economist

noted that "without Latin America's lithium, the green revolution in the global economy will stall" (The Economist 2023c).

Without exaggeration, Latin America and the Caribbean has embarked on a real "race for lithium," in which more and more countries are participating, including the regional heavyweight, Brazil. As the Brazilian Minister of Mines and Energy, Alessandre Silveira, stated in June 2023, the country not only has large deposits of the "white gold," but also the scientific, technical, and industrial potential for the large-scale production and export of lithium-ion batteries (Xinhua Español 2023).

Finally, a tight "knot of global geo-economic and geopolitical tensions" has formed around the problem of ensuring global food security. Russia and Latin America are among the main guarantors. In 2021, Russia, Brazil, Argentina, and Mexico will export $231 billion worth of food. Before sanctions, Russia alone exported food to 160 countries (Top-20 mirovykh eksporterov...).

There are good reasons to believe that the role of LAC countries as major food producers and exporters will increase. In particular, according to the Brazilian Institute of Geography and Statistics, Brazil is expected to produce a record crop of 305.4 million tonnes in 2023 (263.3 million tonnes in 2022), of which almost 96% will be soybeans (148.2 million tonnes), corn (122.8 million tonnes), wheat (10.6 million tonnes) and rice (10.1 million tonnes) (IBGE 2023).

But the issue is not limited to Brazil. More and more Latin American countries, including Paraguay, Peru, Chile, Ecuador, and Central American countries, are becoming significant exporters of agricultural products (alongside the traditional players, Argentina, Mexico, Uruguay). As a result, according to Ilan Goldfajn, President of the IADB, the food produced in LAC is enough to feed 1.3 billion people, twice the population of Latin America itself (Goldfajn 2023).

It is important to stress that progress in the key sectors of the LAC economy, whose products are in high demand on world markets, is inextricably linked to the digitalisation of all aspects of economic activity and the widespread adoption of information and communication technologies and tools. This is one of the main reasons why, in the context of the ongoing global economic transformations, Latin American countries are expanding opportunities for technological renewal and digital modernization of national economic systems. Furthermore, as the example of the energy sector shows, the business and management circles of the region tend to act in an integrated way: strengthening the conventional energy sector (oil and natural gas) while developing alternative energy sources (Yakovlev 2022).

All these signs of a new economic era have not gone unnoticed, and Latin America is increasingly perceived not as the "sick man" of the global economy, but as an actor in addressing priority global issues.

The increased interest in the region on the part of global companies is evidenced by a sharp (55.2%) increase in FDI inflows, from $145 billion in 2021 to a record $224.6 billion in 2022. The main beneficiaries are Brazil, an increase from $46.4 bn to $91.5 bn, Mexico—from $33.5 bn to $38.9 bn, Chile—from $15.9 bn to $20.9 bn, Colombia—from $9.6 bn to $16.9 bn, Argentina —from $6.9 bn to $15.4 bn and Peru—from $7.4 bn to $10.9 bn (see Table 5, p. 117).

Table 5. Foreign direct investment in Latin America ($bn)

Region, country	2019	2020	2021	2022	(% increase)
LCA	158.2	103.8	145.0	224.6	55.2
Argentina	6.7	4.9	6.9	15.4	123.2
Brazil	69.2	37.8	46.4	91.5	97.0
Guyana	1.7	2.1	4.5	4.4	-1.5
Colombia	14.0	7.5	9.6	16.9	76.4
Costa Rica	2.7	2.1	3.6	3.7	2.2
Mexico	29.9	31.5	33.5	38.9	16.2
Panama	4.5	-2.5	1.8	2.5	42.7
Peru	4.8	0.8	7.4	10.9	48.2
Uruguay	1.5	0.5	3.7	9.3	155.0
Chile	13.6	11.5	15.9	20.9	31.0
10 countries in the region	148.6	96.2	133.3	214.4	60.8
Share of 10 countries (%)	93.9	92.7	91.9	95.5	101.9

Source: CEPAL. La inversión Extranjera Directa en América Latina y el Caribe, 2023. Santiago: Naciones Unidas, 2023. P. 27-28.

Therefore, capital investments in Latin America from abroad are clearly counter-trending in relation to the geo-economic crisis processes and reflect both the interest of global TNCs in the raw material potential of LAC and their confidence in the continuation of the course of modernisation in the leading Latin American countries on the basis of digital acceleration.

Change Vector and the Laminar Business Partnership Regime

The Russian-Latin American trade and economic paradigm that emerged in the first decades of the 21st century began to undergo significant changes in 2022 and became significantly more complicated due to the fundamental factors mentioned above: the impact of the global economic transformation, the transition of the Latin American economy to new technological rails, and the restrictive policy of the collective West towards Russia.

The unprecedented anti-Russian financial, economic, technological and trade sanctions imposed by Western countries have caused three sub-sets of problems in our business relations with Latin America.

First, the normal logistics of trade transactions have been disrupted. The lion's share of Russian-Latin American trade is traditionally carried out by sea, but a significant part of the usual logistic routes has been affected by sanctions. Major shipping companies, including Swiss-Italian MSC, Danish Maersk, French CMA CGM Group, and German Hapag-Lloyd, have refused to carry Russian goods. Additionally, Russian cargo and cargo

destined for Russia have been boycotted in many European ports, where goods from Latin American countries are often transhipped. Russia's own transport infrastructure, such as the commercial sea port of Novorossiysk, also came under sanctions. As a result, many logistics chains between Russia and Latin America were severed (Grammatchikov 2022).

Second, Latin American companies had to take into account the threat of so-called secondary U.S. sanctions - penalties for violating (or circumventing) the established sanctions regimes. Fearing such a development, a number of leading Latin American companies operating in Russia suspended their activities. In particular, at the beginning of March 2022, the Mexican company Nemak, a major producer of automotive components, announced its withdrawal from the Russian market, while the Brazilian aircraft manufacturer Embraer announced that it would stop supplying spare parts for its aircrafts to Russia and suspend their maintenance. The latter decision had a significant impact on the interests of S7 Airlines, which had a fleet of 17 Brazilian (Embraer) aircraft (Airline92...).

If the sanctions flywheel accelerates, which seems highly likely, the number of Latin American companies avoiding or reducing business contacts with the Russian economy may increase.

Third, states in the region have experienced (and continue to experience) strong political pressure from the U.S. and the European Union to join anti-Russian sanctions and provide military assistance to Ukraine. For example, they are talking about transferring hundreds of German Leopard tanks from Brazil and Chile to Kyiv, as well as Russian weapons systems purchased by a number of Latin American countries. As Politico reported, the collective West is "engaged in a battle to turn the hearts and minds of Latin Americans against Russia." And it went on to say: "Unfortunately for the Europeans, Latin America has a different point of view" (Politico 2023).

But that is for now. Western political and economic pressure on the region is increasing. Typical examples are the week-long trip by British Foreign Secretary James Cleverly to four Latin American countries (Jamaica, Chile, Colombia, and Brazil) in the second half of May and the visit by European Commission President Ursula von der Leyen to Argentina, Brazil, and Mexico in the first half of June 2023. The emphasis placed by senior European officials in their talks with Latin American leaders was entirely consistent.

In his speech in Chile, the head of the Foreign Office noted that "the tectonic plates of world politics have once again begun to move" and recognised the need to give Latin America a louder "voice" on the international stage. In pragmatic terms, Mr Cleverly stressed the global economic importance of the "lithium triangle," highlighting the role of the British-Australian mining and metallurgical group Rio Tinto, which has invested $1 billion in the area. This investment, according to the diplomat, would ensure the annual production of 100,000 tonnes of lithium (Cleverly 2023).

A major financial and economic deal was offered to Latin American countries by U. von der Leyen. Speaking at press conferences in Brasilia and Mexico City and at an economic forum in Buenos Aires, the President of the European Commission pledged to invest €10 billion in Latin America and the Caribbean as part of the Global Gateway initiative launched by Brussels on 1 December 2021. According to Ms von der Leyen, this

financial injection will serve as a signal to private European investors and individual EU Member States to significantly increase investments in the sectors prioritised for the green energy transition: alternative energies, mining of lithium, copper and rare earth metals, green hydrogen production (European Commission 2023a).

The mention of rare earth metals is noteworthy. This is a new mining sector in Latin America and one of strategic interest to the European Union, given that European countries currently buy 98% of these raw materials from China. Such a dependence on Beijing does not sit well with Brussels, which is feverishly looking for alternative suppliers. In this respect, the Módulo Penco project for the production of lanthanide concentrates, which is being implemented in Chile by the Peruvian company Hochschild, could prove very useful for the EU. It is no coincidence that interested European companies are working on the idea of creating an interregional value chain: from the exploration, mining and processing of rare earths in Latin America and the Caribbean to the transport of concentrates to European factories producing batteries for electric cars (America Economia 2023c).

The third EU-CELAC Summit, which took place in Brussels on 17 and 18 July 2023 (after an eight-year hiatus), raised the stakes in the European Union's relations with Latin America.[2] At this high-level meeting, U. von der Leyen, on behalf of the EU leadership, presented a programme of European investments in the LAC amounting to 45 billion euros for the period up to 2027, with a focus on such economic sectors as green energy transition, digital transformation and extraction of "critical raw materials," primarily lithium (European Commission 2023a).

In essence, Brussels' fundamental task on the Latin America becomes a course to achieve a kind of new edition of globalization, the conjugation of the resource and technological potentials of the EU and the LAC countries within a single economic system.

Another strategic goal of the collective West is to weaken the position of Russian business in the region. Moreover, this strategy does not exclude direct "forceful" methods of pushing domestic companies out of LAC markets. A paradigmatic example is the cancellation by the Canadian company Alpha Lithium of an earlier agreement with one of Rosatom's structures to jointly develop a lithium deposit in Argentina (Yakovlev 2023: 16). There are good reasons to believe that domestic companies in Latin America will repeatedly face various "prohibitive" actions.

But not everything is so straightforward. Most of our Latin American partners have not resigned themselves to the prospect of curtailing business ties with Russia and (together with their Russian colleagues) have begun to seek alternative methods and routes for delivering export and import goods. For example, with the help of carriers from China, the UAE and South Korea, which are interested in expanding their presence in the transport services market.

As a result, despite all the mentioned challenges, the Russian-Latin American trade in 2022 withstood the sanctions test: its volume in monetary terms remained virtually unchanged compared to 2021 ($17.4bn and $17.3bn), and in some areas even increased significantly. In particular, imports of Russian fertilizers to Latin America increased

[2] CELAC - Community of Latin American and Caribbean States is a regional intergovernmental organization created in 2010 that brings together all 33 independent LAC states.

from $5.6 billion to $7.8 billion, or by 39%. Exports of oilseeds to Russia almost doubled, with the region accounting for 59% of domestic imports. In addition, Latin America accounted for over 22% of domestic imports of fruit, almost 27% of coffee and dairy products, 42% of fish, 51% of sugar and 96% of meat (ITC. Trade Map).

By country, last year the trade turnover of the Russian Federation increased with Brazil, Bolivia, Guatemala, Paraguay, Costa Rica and remained at a relatively high level with Mexico. At the same time, trade turnover with Brazil came close to the $10bn mark and accounted for 57% of our total trade with the region (see Table 6, p. 120).

Table 6. Russian Federation trade with LCA countries in 2021-2022 (USD million)

Region, country	2021			2022		
	Exports	Imports	Turnover	Exports	Imports	Turnover
LCA	12303	5139	17442	12524	4780	17304
These include:						
Argentina	651	680	1331	249	498	747
Brazil	5699	1587	7286	7852	1974	9826
Bolivia	68	13	81	85	40	125
Guatemala	239	19	258	279	7	286
Colombia	537	140	677	452	112	564
Costa Rica	83	37	120	113	24	137
Mexico	2206	475	2681	2215	107	2322
Paraguay	62	153	215	73	356	429
Peru	192	642	834	96	405	501
Uruguay	100	115	215	119	74	193
Chile	623	216	839	443	91	534
Ecuador	575	1000	1575	357	1041	1398
12 countries in total	11035	5077	16112	12333	4729	17062
Share in %	90.0	99.0	92.4	98.5	99.0	98.6

Source: ITC. Trade Map. Trade statistics for international business development. Bilateral trade between Russian Federation and Latin America and the Caribbean. –https://www.trademap.org/Bilateral_TS.aspx?nvpm=

The current year has started successfully for Russian traders of oil products, marked by an increase in supplies of diesel fuel to Latin America and the Caribbean. For example, while in the whole of 2022 the export of this product to Brazil amounted to 74 thousand tonnes, this figure rose to 663 thousand tonnes only in January-March 2023, which is a 9-fold increase (Reuters 2023).

However, in the context of ongoing national and global economic transformations, the main element of the current agenda of business relations with Latin America for the Russian Federation is the promotion of domestic technologies and high value-added

products to the region's markets. The facts suggest that such opportunities exist for Russian business.

The nuclear industry is one area of existing and promising cooperation that offers Russia a competitive advantage. Rosatom has long had its eye on Latin America. Argentina, Brazil, and Mexico have nuclear power plants in operation, and many countries in the region have established structures for nuclear research and the practical use of nuclear technologies and products in various sectors of the economy. While Rosatom's attempts to break through and win contracts to build power units in Latin America and the Caribbean have not been successful, recent years have seen a number of interesting and significant commercial deals.

First and foremost is the relationship with Brazil. In early December 2022, Internexco, a Rosatom company, and Industrias Nucleares do Brasil, a Brazilian state-owned company, signed a contract for the supply of enriched uranium products for the Angra dos Reis nuclear power plant for the period 2023-2027. This agreement, under which the Russian side will supply 100% of the Brazilian nuclear power plant's requirements, was the first of its kind concluded with a Latin American and Caribbean state. Shortly afterwards, under another contract, Rosatom supplied neutron flux monitoring equipment for the research reactor of the Nuclear Research Centre in the Brazilian city of Belo Horizonte (Rosatom 2022).

Cooperation in the field of peaceful atomic energy with partners in Bolivia is yielding positive results. In this country, in the second largest city of the country, El Alto, Rosatom, together with the Bolivian Atomic Energy Agency, is building a nuclear research and technology centre, under which a complex for the production of radiopharmaceuticals for the treatment of cancer, unique for Latin American countries, will be put into operation in March 2023. The inauguration of the complex was attended by Bolivian President Luis Arce, who stressed that cooperation with Russia will provide the Bolivian economy with advanced technologies that are in demand not only in Bolivia, but also in neighbouring LAC countries (Rosatom 2023).

Let us take an example from another high-tech industry, pharmaceuticals. Here, the experience of the joint Russian-Nicaraguan vaccine production company "Latin American Institute of Biotechnology Mechnikov," created by one of the domestic backbone companies of the pharmaceutical and medical industry—the St. Petersburg Research Institute of Vaccines and Serums (SPbSRIVS), is instructive. In order to promote its products in the pharmaceutical markets of Latin America (Venezuela, Guatemala, Dominican Republic, Cuba, Nicaragua, El Salvador), SPbSRIVS established the Mechnikov Institute with the aim of establishing it as a biomedical hub not only in terms of sales of finished Russian pharmaceuticals in the region, but also for the production of anti-flu vaccines in Nicaragua. As a result, the Mechnikov Institute is now a local pharmaceutical manufacturer, a Nicaraguan legal entity, which greatly simplifies its operations in Latin American markets.

Such facts, and their number may increase, suggest that there is still a place for Russian business in Latin America, but the paradigm of economic interaction between Russia and LAC cannot remain frozen in time and must evolve in harmony with the requirements of both national (Russian and Latin American) interests and under the influence of ongoing global economic transformations.

* * *

In conclusion, it should be stressed that the geoeconomic transformations and structural shifts that are being observed "in the moment" have already had and will continue to have an impact on the positions of Russia and Latin America in the world economy and international trade, and will inevitably trigger changes in the business environment, accelerate the reset of existing national business models, adapting them to the requirements of the new balance of power.

In the current conditions of growing international competition, sometimes "on the edge of foul play," contacts with Latin American partners should prioritize opportunities for Russian companies in sectors in which Latin American government and business circles express a keen interest. In addition to the development of energy and nuclear medicine, pharmaceuticals, the digital transformation of the economy, the modernisation of the mining industry and the development of new deposits of scarce raw materials are of paramount importance for the countries of the region. The participation of Russian business in these projects is a key strategic task, the main way to make cooperation with Latin America and the Caribbean a laminar, orderly process.

Now, more than ever, there is a need for innovative, "strong ideas" about the prospects of Russian-Latin American business relations and their development in the direction of economic cohesion. It is necessary to prepare to move away from the usual pattern of foreign trade—the predominant exchange of raw materials and foodstuffs—and to focus on trade in industrial products, including products of advanced processing and technology. In particular, Latin American countries could replace some of the goods that Russia has been importing from Western countries, while domestic companies should take a closer look at the needs of Latin American countries for Russian products that have lost their Western markets.

One final point. The economic policies of Latin American countries, which are increasingly oriented toward neighboring countries (nearshoring), require Russian business to "Latin Americanise," to become more deeply rooted in the region's economic system, including through localization of production and the creation of joint ventures with local entrepreneurs, as well as the formation of consortiums with companies from friendly countries of the Global South.

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Overview of the Roundtable "Sanctions against Russia: Consequences for the Global Economy"

On 11 April, 2023, a roundtable on "Sanctions against Russia: Consequences for the Global Economy," organized by the School of World Economy of the National Research University Higher School of Economics, was held as part of the 24th Yasin (April) International Academic Conference on Economic and Social Development. Presentations were made by representatives of leading Russian research centers in the field of world economy. Participants in the event discussed the challenges of global economic development in the context of sanctions pressure on Russia and possible solutions.

* * *

The roundtable was opened by **Igor Makarov**, head of the School of World Economy, who noted the importance of the sanctions issue and the holding of a large number of discussions on it, including those during the April conference. Makarov outlined the focus of the event: the impact of sanctions not on the Russian, but on the global economy, their role in the turbulent processes currently observed—rising interest rates in the world's leading countries, soaring inflation, rising energy and food prices, the banking crisis in the United States and Western Europe.

The first report, "Sanctions against Russia: Challenges and Opportunities" was presented by **Alexander Knobel**, Director of the Institute of World Economics and Finance of the Russian Foreign Trade Academy. The expert first of all noted that sanctions are not a new innovation, neither in the last decade nor in the 20th century, and have always been an alternative to military action. The question of whether the current sanctions against Russia can hit the global market should be answered positively: yes, they can. Russia plays an important role in the global economy: It has large foreign exchange reserves and is a major player in the oil, gas, nuclear fuel, and food markets. Restrictions on these Russian goods will certainly have an impact on world prices and the macroeconomic situation on a global scale.

During his presentation, the speaker proposed to methodologically consider the current sanctions as part of a larger narrative of growing restrictions and contradictions in international trade over the past decades. These include the rise of protectionism, trade wars, problems of digitalization, intensified climate negotiations, the reconfiguration of global supply chains, and geopolitical crises. The scope of sanctions against Russia is very broad—financial sector, transport, trade, energy sector, personal sanctions. In terms of impact on the global economy, trade sanctions are the most significant. Knobel separately focused on the issue of the crucial nature of sanctioned Russian imports and the difficulties of their full substitution by products from neutral countries. According to the expert and his colleagues, who have made a forecast on the development of Russia's

foreign trade, in the coming years the country will see a slight recovery in imports and a decline in exports. Even by 2030, Russia will not be able to return to the level of 2022 exports in terms of value.

In conclusion, the speaker identified two types of response to the current situation: short-term and long-term. The short-term reaction is a reorientation of foreign economic activity in order to adapt to the current reality. The long-term path is the development of foreign economic integration interaction, which consists in searching for additional sources of trade growth and economic growth through deeper integration with neighboring and neutral distant foreign countries.

Alexey Kuznetsov, Director of the Institute of Scientific Information on Social Sciences of the Russian Academy of Sciences, opened the discussion on the impact of sanctions against Russia on global flows of foreign direct investment (FDI). The speaker stressed that precise statistical estimates can be made no earlier than 2025, while operational data for 2022 and even 2023 may reflect the impact of conjunctural factors not directly related to the conflict in Ukraine and sanctions.

On the one hand, the Russian Federation's share of cumulative outward FDI is small, at around 1% of the global total. On the other hand, it is the result of 30 years of growth from virtually zero, and Russia has often been among the top 10 countries in the world in terms of current FDI exports, indicating its significant role. All researchers agree that the events in Ukraine, as well as the rise in food and energy prices partly related to these events, could not have passed without an impact on FDI. At the same time, the situation in Russia in 2022 is unique. In the past, asset confiscation took place in two cases, neither of which is appropriate for the current situation: (1) the confiscating country experienced domestic political cataclysms (revolution, civil war, etc.), and (2) wealthy countries confiscated assets when it was certain that the enemy country would be destroyed or capitulate in a war.

The reasons for the determination of Western countries to take risky actions to confiscate Russian assets are, first, the fact that the entire global system of investment insurance is structured in such a way that all EU countries are effectively unprejudiced (only economic risks can be insured, not political risks). Second, the Russian oligarchs were expected to react aggressively to the seizure of assets, even attempting a coup d'état. In addition, the West underestimated Russia's economic potential and did not believe in the ability of the Russian political elite to engage in direct conflict.

Kuznetsov stressed that Russian business has really lost a lot. As early as 2014, external borrowing capacity to support the expansion of Russian companies has deteriorated sharply, and as a result, Russia has fallen out of favor among the leaders in FDI exports. Some companies have lost their multinational status. In 2022, there was a 100% loss of assets in Ukraine and confiscation of assets in Western countries. It is still difficult to assess the significance of this confiscation of Russian assets for the global economy–Russia's long-term position on this issue is important. The speaker suggests that after the active phase of the confrontation over Ukraine is over, maximum efforts should be made to change the rules of international assessment and insurance of investment risks: first at the level of the EAEU, then the BRICS countries, and then other Asian and African countries should be consistently involved. Russia's foreign economic

relations should be directed towards the global South, especially in the area of FDI. As for Europe, it is not yet thinking about the long-term consequences, but actions against Russian business will damage its investment reputation in the eyes of Arab countries, China and some African countries.

Anastasia Podrugina, Associate Professor at the School of World Economy at the National Research University Higher School of Economics, opened the discussion on the role of sanctions in global inflationary processes. In recent decades, starting from the 1990s and especially after the global economic crisis, the world economy has been living in a period of low inflation. The Phillips curve became flatter, meaning that even a significant increase in the money supply did not lead to an increase in inflation. Among the reasons for this phenomenon, Podrugina mentioned the transition of most central banks of developed countries to inflation targeting, globalization, accelerated technological development, and structural changes in the labor market.

However, after the COVID-19 pandemic, inflation began to rise. The main reasons are both demand-side shocks, caused by extra-loose monetary policy and significant fiscal stimulus in advanced economies, and supply-side shocks—disrupted production chains, logistical difficulties. The Russia-Ukraine conflict and subsequent sanctions are adding to inflationary pressures through higher energy and food prices and disrupted supply chains in Europe. As a result, developed countries are moving into a high inflation regime—a fundamentally new economic equilibrium with higher rates of price growth. Inflation is becoming more volatile, price increases in different sectors of the economy are correlated, and inflation is becoming more inertial. Thus, the world has moved from an economic reality of low interest rates and low inflation to a new economic reality of high inflation and high interest rates.

The speaker noted that with high levels of debt, especially sovereign debt, central banks now face a choice between price stability and financial stability. In a low-inflation period, especially after the global financial crisis, loose monetary policy supported both price and financial stability. In a high-inflation regime, measures to maintain price stability come into conflict with measures to maintain financial stability. In a crisis situation, financial stability comes to the fore, and the IMF recommends that central banks give priority to preserving financial stability and protecting economies from systemic risks.

In his speech, Professor **Leonid Grigoryev**, scientific head of the School of World Economy, tried to imagine what the world economy might look like without sanctions. The speaker stressed that modern sanctions were imposed quickly, designed by nonspecialists and often ignorantly, with completely wrong ideas about the potential of the Russian economy. What is important is not even the reason why sanctions were imposed, but why they did not work, and this needs to be assessed.

According to Grigoryev, in the world, sanctions have benefited (1) some exporters of oil and other commodities by stabilizing prices, (2) countries that have started refining Russian oil, (3) all the world's officials who specialize in restrictions and controls, and (4) intermediaries in world trade by restructuring it and changing commodity flows. As a result, instead of a liberal economy, an economy of restrictions and bureaucracy has emerged.

Grigoryev concluded his presentation by returning to the theme of the previous speech on inflation. While agreeing that it was debatable whether the sanctions had slowed the fall in energy prices, he noted that the period of high prices would have lasted until the autumn against the background of fear. One should not look at monthly inflation trends, but at cumulative inflation. In the autumn of 2022, labor contracts become part of the equation, trade unions become more active and, as a result, the classic mechanism of price growth was triggered. In other words, without sanctions, price and interest rate growth would be lower.

Vyacheslav Kulagin, Head of the Department of World and Russian Energy Sector Studies of the Energy Research Institute of the Russian Academy of Sciences, presented the final report that preceded the roundtable discussion. Commenting on the consequences of sanctions and their impact on the growth of energy prices, the speaker called for sanctions not to be separated from geopolitics. The geopolitical-sanction premium on prices arises in Europe, for example, as a consequence of filling up underground gas storage facilities, which is a risk insurance tool that was not previously required, but now results in higher prices for consumers. Similarly, excess regasification and the construction of new terminals. Other important groups of new costs include the cost of upgrading refineries as a result of changing suppliers, switching to more expensive energy supplies and suboptimal supply routes. At the same time, weather is becoming an increasingly important factor for the global and European economy. The transition to renewable energy sources and possible outages in the event of adverse weather conditions pose many risks in the absence of substitute and stabilizing supplies. All of this is leading to price increases on both the European and global markets. The speaker separately addressed the factor of declining influence of Western energy companies on fuel markets, due to diminishing trust in them and as a result of environmental policies in their home countries. In turn, energy companies of developing countries, primarily China, are trying to move to full control, "from well to consumer." In addition, alternative centers of technological development have begun to emerge. The experience of Iran, which has mastered the production of turbines, is significant in this respect. Thus, a powerful investment potential is emerging outside the OECD, financial resources and technologies are appearing among other players, and the need for Western oil and gas companies is diminishing. The expert also touched on the issue of high volatility in energy prices, which he expects to increase. At the same time, under the conditions of energy market imbalances, there is a rather significant growth of investments in hydrocarbons.

Finally, the speaker assessed the consequences of the ongoing changes for the world economy, noting that difficult times lie ahead for certain industries, particularly in Europe. A difficult period is also beginning for the poorest countries, which are faced with expensive energy and a lack of financial resources. Overall, energy will become more expensive for consumers. With the massive investments being made today, we can expect an oversupply in the energy markets in two to three years' time and a consequent price collapse. Another important consequence of the current transformation of energy markets is that, in addition to the geopolitical-sanction price premium, there is also a geopolitical-sanction CO_2 surcharge resulting from suboptimal logistics, which increases transport leverage and fuel consumption.

The roundtable ended with a lively discussion. The moderator of the event, Igor Makarov, led a round of lightning questions to the speakers, and the participants and guests discussed the most important and sensitive details of the consequences of sanctions for the Russian and global economy.

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