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THE WORLD ECONOMY IN THE ERA OF TURBULENCE

This article aims to reveal the problem of measuring the effect of official development assistance (ODA) in minimizing political risks to foreign direct investment (FDI) and to provoke an academic discussion on the key limitations that complicate such measurement, as well as ways to overcome them. Research has demonstrated that private businesses and government authorities in donor countries share a mutual interest in using development cooperation toolkit to manage political risks associated with investment in developing countries. For this purpose, home country governments can use both conventional development assistance instruments and guarantees, for which the OECD Development Assistance Committee has recently authorized the calculation of grant equivalents and their reporting as ODA. The mitigating effect of traditional forms of development assistance can theoretically be measured by correlating data on the volume of funding for certain relevant sectors with the values of the relevant components of the most authoritative political risk ratings. However, the implementation of this idea is impeded by the reciprocal influence of the explanatory and dependent variables. A high degree of political instability in the recipient country inherently constrains the allocation of aid. Furthermore, both parameters are influenced by a multitude of endogenous and exogenous factors, which can be expressed only through dummy variables. In the case of guarantee instruments, there is a theoretical possibility of assessing the strength of both their catalytic effect and the "halo effect," which additionally protects investments from political risks of "legal-governmental" origin. The catalytic effect could be measured based on the exact conditions of the guarantee coverage and the amount of private capital mobilized, and the "halo effect"—based on the total number of projects supported by guarantees against political risks and the number of projects where this effect did not work. However, the practical realization of this idea is hampered by a fundamental lack of statistical data of adequate quality. The aforementioned limitations underscore the necessity of employing qualitative methods when investigating the stated topic. This approach necessitates the utilization of a diverse array of complementary sources of various types.

This study analyzes the uneven economic impact of the COVID-19 pandemic in different countries and identifies the factors that influence the size of these losses. The study used econometric models to estimate economic losses in 2020 and cumulative losses for 2020–

INTERNATIONAL INTEGRATION

INTERNATIONAL TRADE AND INVESTMENT

This article presents the results of a comparative analysis of global trends in world trade after the global financial crisis of 2008–2009, with special focus on the balance of macroregions in international trade, their self-sufficiency in the supply of intermediate goods, and the growing role of services in the transformation of the architecture of economic globalization at the current stage. The research methodology was based on quantitative indicators of trade openness, geographical concentration and participation in global value chains. As a result, it was found that since 2009, international trade openness has been declining in Asia, remaining at precrisis levels in North America and increasing in Europe, with Asia displacing Europe as the largest macroregion in terms of merchandise exports. Asia and North America strengthened the regional component of value chains during this period, while Europe increased its dependence on external intermediate supplies. It is found that international trade in services continued to grow in absolute and relative terms after 2009. China and India have been integrating into the "service" segments of value chains at a faster pace, strengthening their weight in relation to developed countries. It appears that the growth potential of international trade in services is far from being exhausted. It is this sector that could be the engine of the future wave of economic globalization.

COUNTRY VIEW

With the development of the modern global economy and the uncertainty that increases every year, the issues of national security in general and food security in particular are coming to the fore in many countries. Food security is directly related to imports and their cost in terms of food products. Developing economies are more vulnerable in this respect than developed economies. The article aims to assess the food security of Armenia in the context of the structure of critical food imports and ways to reduce them. The analysis shows that Armenia is highly dependent on food imports, which reduces the level of its food security and negatively affects the overall economic security of the country. The country needs to revise its policy on ensuring the food security of Armenia in the medium and long term.

OPINION

REVIEWS

Mitigating Effect of Official Development Assistance on Political Risks to Foreign Direct Investment: Limits of Measurability

Vladimir Bartenev

Vladimir Bartenev — leading research fellow at the Institute for Advanced Strategic Studies of the HSE University.

SPIN-RSCI: 9801-1158
ORCID: 0000-0001-9804-0630
Researcher ID: AAE-4219-2019
Scopus Author ID: 57188561575

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Abstract

Mitigating political risk is a critical condition for mobilizing private capital need to achieve the Sustainable Development Goals. However, the issue of measuring the mitigating effect of various financial and non-financial instruments has not yet been conceptually or technically elaborated. This article aims to reveal the problem of measuring the effect of official development assistance (ODA) in minimizing political risks to foreign direct investment (FDI) and to provoke an academic discussion on the key limitations that complicate such measurement, as well as ways to overcome them.

Research has demonstrated that private businesses and government authorities in donor countries share a mutual interest in using development cooperation toolkit to manage political risks associated with investment

in developing countries. For this purpose, home country governments can use both conventional development assistance instruments and guarantees, for which the OECD Development Assistance Committee has recently authorized the calculation of grant equivalents and their reporting as ODA.

The mitigating effect of traditional forms of development assistance can theoretically be measured by correlating data on the volume of funding for certain relevant sectors with the values of the relevant components of the most authoritative political risk ratings. However, the implementation of this idea is impeded by the reciprocal influence of the explanatory and dependent variables. A high degree of political instability in the recipient country inherently constrains the allocation of aid. Furthermore, both parameters are influenced by a multitude of endogenous and exogenous factors, which can be expressed only through dummy variables.

In the case of guarantee instruments, there is a theoretical possibility of assessing the strength of both their catalytic effect and the "halo effect," which additionally protects investments from political risks of "legal-governmental" origin. The catalytic effect could be measured based on the exact conditions of the guarantee coverage and the amount of private capital mobilized, and the "halo effect"—based on the total number of projects supported by guarantees against political risks and the number of projects where this effect did not work. However, the practical realization of this idea is hampered by a fundamental lack of statistical data of adequate quality.

The aforementioned limitations underscore the necessity of employing qualitative methods when investigating the stated topic. This approach necessitates the utilization of a diverse array of complementary sources of various types.

Introduction

The engagement of the private sector in financing the Sustainable Development Goals (SDGs) has emerged as a pivotal topic in global discourse. Initially, it was evident that political risks for foreign direct investment (FDI) could impede a qualitative leap in this direction. Historically, the majority of investment has been directed toward stable, high-income countries rather than toward states with lower incomes, which are more susceptible to internal and external challenges.

The mitigation of such risks has been identified by experts and policymakers as a priority. However, the issue of measuring the mitigating effect of various financial and non-financial instruments has not been sufficiently elaborated either conceptually or technically. The article's objective is twofold: first, to elucidate the fundamental problem of measuring the effect of official development assistance (ODA) on minimizing political risks for foreign direct investment; and second, to stimulate an academic debate on the key limitations that complicate such measurement and potential strategies for overcoming them.

No examples of similar goal setting have been found in the scientific literature. Despite the fact that commercial interests are invariably mentioned in the research on the motives for aid and its effectiveness, both foreign [Berthélemy 2006; van Veen 2011; Dreher, Lang, Reinsberg 2024, etc.] and domestic [Degterev 2012; Baranovskii 2018, etc., Morozkina 2018, etc.] studies almost always focus on export promotion rather than investment. The endeavors to evaluate the efficacy of official development assistance (ODA) in influencing political risk factors that impact foreign direct investment (FDI) are sporadic and tend to concentrate on individual risks, such as expropriation [Asiedu, Jin, Nandwa 2009; Jin, Zeng 2017, et al.], terrorism [Bandyopadhyay, Sandler, Younas 2014; Efobi, Asongu, Beecroft 2018, etc.], corruption [Bahoo et al. 2023], or the policies of individual donors (mainly the PRC [Lu, Huang, Muchiri 2017; Wang, Yang, Li, Zhang 2022; Gomboin 2023, etc.]). The depth of scientific exploration of the problem does not correspond to the level of attention paid to it in political discourse [Bartenev 2023]. This finding underscores the existence of a discernible research niche, this article aiming to expand the knowledge in this area.

The article is organized into three sections. The initial section provides a concise overview of the general conceptual framework. The subsequent section delineates a series of issues pertinent to the evaluation of the mitigating effect of "conventional" ODA instruments on political risk. The third section delineates the challenges associated with the quantification of the mitigating effect of guarantee instruments, for which the OECD Development Assistance Committee (OECD DAC) has recently authorized the calculation of grant equivalents and their reporting as ODA.

1. Conceptual framework

Political risk constitutes an inherent and well-studied type of risk for foreign economic activity (FEA) in general and FDI in particular. In its most general form, it represents the probability of incurring financial losses due to the actions (or inaction) of various political actors, such as public authorities and representatives of states in international organizations, capable of generating "legal-governmental risks," and various non-state actors, capable of generating "extra-legal" risks.[1]

Entities that provide protection for investments against political risks utilize lists that, while not identical, exhibit a high degree of similarity. The comparison of the current lists utilized by pertinent international organizations was made, including the Multilateral Investment Guarantee Agency (MIGA), the Asian Development Bank, the African Trade Insurance Agency, the Arab Investment and Export Credit Guarantee Corp., national development finance institutions (DFIs) or export credit agencies (ECAs) of the world's largest economies (the United States, China, Japan, Germany), and leading private insurance companies (AIG, Chubb, Lloyd's, Sovereign, Zurich Insurance). This comparison helped formulate a consolidated shortlist of political risks of various origins against which FDI is most often protected. This shortlist includes nationalization and expropriation, restrictions on currency transfers, breach of contract, and various forms

[1] The differentiation between "legal-governmental" and "extra-legal" risks was proposed in [Kennedy 1987].

of political violence, such as wars, revolutions, coups d'état, and terrorist attacks. The majority of these risks may affect either the host country as a whole, a particular region, a specific industry of that country, or even a particular foreign investor.

To measure political risks one can use both statistics on the political process, the state of the business, investment and regulatory climate, and political risk ratings calculated by specialized consultancies (AON, Control Risks, Economist Intelligence Unit, Marsh, PRS Group, etc.) based on their proprietary methodologies. The most widely recognized of these is the methodology of the International Country Risk Guide (ICRG) by The PRS Group, which calculates the level of political risk based on 12 components: 1) government stability; 2) socio-economic conditions; 3) investment profile; 4) internal conflict; 5) external conflict; 6) corruption; 7) military in politics; 8) religious tensions; 9) law and order; 10) ethnic tensions; 11) democratic accountability; 12) bureaucracy quality [The PRS Group 2022]. This rating does not encompass all jurisdictions (approximately 150 countries are covered) but it has several notable advantages, particularly its continuous compilation over a span of four decades (since 1984). This extensive history contributes to its extensive utilization in academic literature, including works addressing similar issues to those outlined herein [Asiedu, Jin, Nandwa 2009; Bandyopadhyay, Sandler, Younas 2014; Fon, Alon 2022, among others]. An additional argument in favor of the utilization of political risk indices (despite the inherent imperfections in their methodologies) is that international companies, when formulating their own investment strategies, frequently adhere to these indices rather than the original statistical data on which these indices are calculated.

The key parameters of political risk, akin to any other type of risk, are the likelihood of its materialization and the scale of possible losses (impact). These parameters are instrumental in the ranking of risks and the development of risk management strategies.

All traditional risk management strategies have been shown to be applicable to political risks for FEA. Among them: Firstly, risk avoidance refers to the cessation of risky activities, which serves to reduce the probability of risk materialization and, consequently, losses to zero. Secondly, risk reduction, which includes diversification, is designed to minimize the probability of risk materialization and the extent of its negative impact. Thirdly, risk insurance, through its transfer to a third party, aims primarily to minimize damage by ensuring that losses are covered by a guarantor or insurer. Of the aforementioned behaviors, our primary interest lies in the reduction and insurance of risk.

Obviously, a private company focused on foreign markets,[2] in its endeavor to manage political risks for FDI, could hypothetically do without interacting with home country government institutions (See for more details: [Godfrey, Merill and Hansen 2009; Ali et al. 2021; Choi, Chung and Wang 2022]). First, it can go down the path of establishing joint ventures. Second, lobby the host country authorities. Third, it can turn to private insurance companies and buy insurance against individual risks of one origin or another, or some kind of bundled product. Fourth, bet on the implementation of social projects in

[2] In this article, private companies are defined as business organizations in which private ownership exceeds 50%. This definition is consistent with the distinction between official and private cross-border flows to developing countries as used in the OECD statistics.

the country where it places its investments. The latter makes it possible to minimize, on the one hand, the risks of "legal-governmental" origin (with the authorities of the host country adopting targeted restrictive measures against it) and, on the other hand, the risks of damage to its property in the course of revolutions, protests, etc.

Concurrently, private enterprises may pursue a range of strategies to manage political risks, including the engagement with official institutions within the country of origin. Some strategies entail the cultivation of relationships with the state as a provider of international development cooperation (for more details, see [Bartenev 2023b]). It is evident that such interactions are also executed by state-owned enterprises. Concurrently, the parameters of political risks they confront in the host countries, particularly in the context of escalating interstate rivalry, and the strategies for mitigating such risks will exhibit distinct variations that merit independent consideration (beyond the scope of this article).

On the one hand, a company can seek financial coverage from the home country authorities for losses from political risks associated with planned (or already made) investments in developing countries. This process entails the submission of an application to either an ECA or a DFI to get the aforementioned protection for a fee. Consequently, such company benefits from substantial coverage of the invested funds (typically at least 90%), in addition to political support from the state. This confluence of factors serves to mitigate the likelihood of materialization of pivotal "legal-governmental" risks, chief among them being nationalization and expropriation. The so-called "halo effect" emerges: the authorities of the host country may refrain from taking any restrictive measures against foreign companies associated with the guarantor, due to concerns over the potential deterioration of bilateral relations, although such behavior is by no means predetermined.

Conversely, a private company may engage in lobbying authorities of the country of origin, with the objective of persuading them to provide assistance to the host country. This assistance would serve to mitigate any potential political risks that could adversely impact the company's operations in the host country. Such assistance could take various forms, including but not limited to: improving the investment and business climate; improving legislation; combating corruption (mitigating risks of "legal-government" origin) on a nationwide scale; streamlining regulatory practices in specific economic sectors; or providing support aimed at reducing conflict potential in a society (designed to mitigate risks of "extra-legal" origin). The aforementioned forms of assistance have been operational for multiple decades, constituting a significant component of ODA flows.

A distinct strategy entails the host country's government providing backing for capital investments by specific companies through the provision of concessional preferential financing. This approach is intended to dissuade the authorities of the recipient country from engaging in actions that could potentially result in the expropriation of the investor's assets or other detrimental actions. The latter method is currently widely employed by the People's Republic of China [Gomboin 2023]. Evidently, the provision of such assistance will serve to mitigate political risks for companies from the provider country, yet it will not extend to investors from third countries.

Finally, another option available to companies from the donor country is to implement international development projects and programs as contractors, being selected either through "tied aid" mechanisms (when the range of suppliers of goods and services is formally restricted to companies from a donor country) or through procurement processes open to companies from other countries.[3] In this way, a company from a donor state may enter new, untapped foreign markets at zero risk without making its own capital investments. Although in recent years the practice of "tying" aid has been associated primarily with the PRC, it is common to many DAC donors. Regardless of the OECD DAC Recommendation on Untying ODA, meant to reduce the share of tied aid for the most vulnerable categories of countries, no meaningful progress has been made in its implementation: since the turn of the century share of the de jure tied aid in total ODA from the DAC donors has even increased from 16.9% in 2000 to 19.1% in 2022. De facto, in only 13% of projects, developing countries were the suppliers of goods and services, and in only 9% donors contracted with firms from the recipient country itself [OECD 2022a].

Private companies are taking proactive steps to utilize the aforementioned options. They send their representatives to parliamentary hearings on development policy and to various advisory bodies set up under national development agencies, provide grants to various think tanks to conduct research on development assistance issues,[4] and so on. The active exchange of personnel between the private sector and development agencies is also of great importance, with representatives of the corporate world joining development agencies and acting as advocates for private business.

For their part, home country authorities may also be interested in addressing the political risk mitigation needs of domestic companies in all the ways described above.

On the one hand, they are driven by foreign and foreign economic policy imperatives, such as the desire to support the expansion of national export-oriented businesses, which can help strengthen political influence in the countries where they operate. Moreover, the provision of guarantee protection against political risks generates income, which in some cases can be quite substantial[5] and can be used by a DFI for subsequent reinvestment and expansion of its guarantee and loan portfolios.

On the other hand, the authorities of donor states can also be driven by the desire to comply with modern international development "standards," which today include the creation of favorable conditions for the mobilization of private capital. Many key international documents adopted in the first quarter of the 21st century, including the 2030 Agenda for Sustainable Development itself and the 2015 Addis Ababa Action Agenda, guide providers to this end.

[3] "Linking" is also possible when donor states implement targeted projects through international organizations.

[4] A typical example of this kind of research program is the Project on US Leadership in Development, implemented by the influential Washington-based Center for Strategic and International Studies (CSIS; the organization is recognized as undesirable in Russia) since 2011 and funded by the oil giant Chevron.

[5] For example, in FY 2020–2023, political risk insurance accounted for 35% of all US International Development Finance Corporation revenues (about $600 million). Expenditures amounted to only $95 million (about 9.6%), of which $45 million were insurance payments related to the escalation of the conflict in Ukraine in 2022 [US International Development Finance Corporation 2023. P. 81].

Based on the logic described above, there is a hypothetical possibility of "quantifying" the mitigating effect of various ODA-reported flows on political risks using data from official international statistics, but there are a number of important limitations.

2. Challenges in assessing the mitigating effect of conventional ODA instruments

In the domain of international development cooperation, the challenge of operationalizing specific quantitative metrics is typically addressed through the agreements among representatives of prominent state-owned entities, facilitated under the aegis of international organizations. The OECD DAC has served as the primary multilateral platform for more than half a century, having been established in 1961 on the basis of the Development Assistance Group of the Organization for European Economic Cooperation. In 1969 this body adopted the still highly relevant technical and statistical metric "official development assistance" (ODA), designed to ensure the comparability of contributions from different states, and the principles of ODA-eligibility.

According to the most recent iteration of the OECD DAC's converged statistical reporting directives, as presented in September 2024, ODA encompasses "grants and loans to the official sector of countries and territories on the DAC List of ODA Recipients, INGOs and multilateral development institutions which are: a) provided by official agencies, including state and local governments, or by their executive agencies; and b) each transaction of which: is administered with the promotion of the economic development and welfare of developing countries as its main objective; and is concessional in character" [OECD 2024a. P. 17].

Today the ODA metric encompasses a substantially broader array of flows than a half a century ago. This expansion of the ODA persists despite the deliberations on the obsolescence of the metric. Approximately 50 countries report ODA to the OECD in one way or another, including 32 OECD DAC members and about 20 non-DAC countries, including major providers such as Turkey and the Arab monarchies from the Gulf. It is noteworthy that neither the People's Republic of China (PRC) nor the majority of other non-Western providers of South-South cooperation report ODA to the OECD. However, there are documented instances of scrupulous estimates of "ODA-like flows" from the latter category, particularly as reported by the AidData research lab at the College of William and Mary (United States) [Custer et al. 2023].

The data on ODA contained in the OECD databases is quite detailed. For the majority of providers, comprehensive data on the allocation of financial assistance among diverse measures, modalities and channels is accessible. A critical aspect of addressing the task outlined in this article is the sectoral differentiation of ODA flows with each sector being assigned a distinct code, known as a "purpose code." The OECD code lists used in the Creditor Reporting System (CRS) contain a total of more than two hundred such sectors (in addition, donors can voluntarily report on their activities in even greater detail using an additional set of codes) [OECD 2024c].

These purpose codes have been used several times to identify a specific set of areas deserving special monitoring. For example, in 2006, the Working Group established

by the WTO to implement the Aid for Trade initiative,[6] composed a very broad setlist of the CRS purpose codes to track the dynamics of the aid for trade flows [OECD/WTO 2015. P. 455–459]. Similarly, the OECD Secretariat agreed in 2023 on a list of 22 purpose codes for the new umbrella category "Peace ODA," the calculation of which was based on the approach proposed by the Institute for Economics and Peace in 2017 [Institute for Economics and Peace 2017]. The category combines "core" peacebuilding areas from subsection 152 of the OECD CRS list of purpose codes ("Conflict, peace and security") and "secondary" peacebuilding areas from subsection 151 ("Government and civil society, general") [OECD 2023a].

Despite several precedents of creating a list of purpose codes for a specific task, no analogous list of "sectors" significant for mitigating political risks for business has been proposed at the international level (which is generally logical, given the declared focus of ODA on promoting the development in recipient countries, rather than on protecting the investments of companies from donor countries). Consequently, in the development of metrics for quantifying the contribution of ODA in mitigating political risks for business, it is essential to adhere to the conventional logic.

Consequently, the predictor should be the amount of ODA of one or another type (in absolute terms) sent by the provider state A to the recipient country B, which is at the same time a host country for FDI from state A. The extant scholarly literature contains numerous examples of the utilization of aggregate metrics, including those expressed as a percentage of GNI, in conjunction with various categories of ODA. These categories include bilateral aid, multilateral aid, loans from individual international organizations, conflict-oriented ODA coinciding in scope with the aforementioned "core" peacebuilding subset of peace ODA, aid for infrastructure, and others—as predictors in assessing the mitigating effect of foreign aid.[7]

The OECD CRS code lists help identify sectors deemed most effective in mitigating political risks faced by businesses from donor countries in recipient countries. These sectors are determined based on prevailing assumptions about FDI activities. These areas can be readily correlated with the parameters that comprise the most prominent political risk indices, particularly the rating calculated by The PRS Group according to the ICRG methodology (see Table 1 on p. 13).

Table 1. Results of correlating the ODA sectors of high risk mitigation potential with subcomponents of The PRS ICRG political risk rating

ODA sector, OECD CRS purpose code		**Political risk components, The PRS ICRG methodology**
Code	*Description*	*Component and its weight (%)*
15110	Public sector policy and administrative management	Bureaucracy quality (4)
15111	Public finance management (PFM)	

[6] Launched at the Ministerial Conference in Hong Kong in December 2005.

[7] See our earlier review of relevant foreign studies using various techniques and published up to and including 2023 [Bartenev 2023a], as well as recent publications that assess the catalytic effect of ODA and consider country risk indicators as variables (e.g., [Bertrand and Betschinger 2024]).

ODA sector, OECD CRS purpose code		Political risk components, The PRS ICRG methodology
15113	Anti-corruption organizations and institutions	Corruption (6)
15130	Legal and judicial development	Law and order (6)
15150	Democratic participation and civil society	Democratic accountability (6)
15151	Elections	
15152	Legislatures and political parties	Government stability (12)
15160	Human rights	Law and order (6)
15210	Security sector management and reform	Military in politics (6)
15220	Civilian peacebuilding, conflict prevention and resolution	Internal conflict (12) External conflict (12) Religious tensions (6) Ethnic tensions (6)
15230	Participation in international peacekeeping operations	
15240	Reintegration and small arms and light weapons control	
15250	Removal of land mines and explosive remnants of war	
15261	Child soldiers (prevention and demobilization)	
16010	Social protection	Socio-economic conditions (12)
16020	Employment creation	
16070	Labour rights	
24010	Financial policy and administrative management	Investment profile (12)
25010	Business policy and administration	
51010	General budget support-related aid	
600	Action relating to debt	

Source: compiled by the author on the basis of: [OECD 2024b]; [The PRS Group 2022].

As we can see, 10 of the 12 components of this political risk rating correlate with the CRS purpose codes from code 150, Government & Civil Society, which are included in the above-mentioned "Peace ODA" category already used by the OECD Secretariat for monitoring purposes. However, it does not make sense to calculate correlation coefficients between the aggregate amounts of "peace ODA" provided by country A to country B and country B's aggregate political risk score from The PRS Group. No donor distributes its aid to an individual recipient evenly across all sectors, which means that different political risks will be mitigated to varying degrees. This clearly indicates the need to calculate correlations between the directly linked ODA sectors and the components of the political risk rating. Such an analysis could hypothetically allow for comparing the mitigation potential of aid to different sectors (or their clusters) with each other. However, there are very serious obstacles to a realization of this idea.

First of all, we note the problem of simultaneity bias, which complicates the application of econometric methods.

Not only can development assistance policies influence the level of political risk in recipient countries, but vice versa: there is a pronounced parallel relationship between ODA levels and the level of political risk in recipient countries and the factors which generate that risk.

According to the latest data collected by the International Network on Conflict and Fragility (INCAF), ODA to the 60 countries categorized as "fragile contexts"[8] decreased by 10% from 2010 to 2022, and in 2022 amounted to only 48.8% of ODA reported to the OECD DAC, the lowest figure over the last decade [OECD 2024d. P. 3]. Equally important is the fact that "peace ODA" is declining: in 2022—against the background of a sharp increase in ODA to Ukraine—this indicator amounted to $4.9 billion, and its share in the total amount—to only 9.9% (the lowest figure since 2006) [OECD 2024d. P. 10]. Separately, the fragmentation of aid increases along with the level of "fragility" of recipients: for example, in an "extremely fragile contexts" there are on average 27 bilateral and 14 multilateral donors, in others there are 22 bilateral and 11–14 multilateral donors [Hoeffler and Justino 2023. P. 8]. This trend seems particularly alarming, since donor proliferation increases the burden on the already weak institutions in recipient countries, thus becoming an additional factor of political risk, including for foreign investment.

Moreover, *there are myriad endogenous and exogenous political risk factors that affect their level (and hence FDI flows) beyond inward ODA*.

Let us imagine just one of the many specific situations that can occur in the "donor-recipient" dyad. For most of the year, donor country A sends quite significant amounts of aid to recipient country B, whose domestic and foreign policy is generally in line with the donor's interests, including in the areas outlined in Table 1. Then, in the last quarter, country B undergoes a coup d'état due to domestic factors, and a government comes to power that is much less loyal to country A and the presence of its public and private companies. In response, country A decides to temporarily suspend or substantially reduce aid to country B.

This situation will be reflected in statistics in a very specific way: the annual value of the key components of The PRS Group's political risk rating, calculated according to the ICRG methodology as the arithmetic mean of the sum of monthly values, is likely to exceed the previous calendar year, while the numerical value of ODA provided is likely to be lower than in the previous year. Numerical indicators taken on their own, without taking into account the described radical change in the political context, would indicate a negative mitigating effect (less aid, more risks), but in reality the parameters would change independently of each other.

Even if these two problems had a conceptual solution, the quality of the numerical data available for running regressions on the basis of the proposed methodology could hardly be recognized as satisfactory. Unfortunately, the representatives of donor countries do not always assign a numerical purpose code to a development assistance project in a methodologically sound manner.

Let us illustrate this problem with the example of the sector "Business policy and administration." Its formal description, contained in the OECD DAC materials, allows to characterize it as a sector with a high potential of mitigating political risks of "legal-governmental" origin: "Public sector policies and institution support to the business environment and investment climate, including business regulations, property rights,

[8] As of 2022, "fragile contexts" accounted for 24% of the world's population, but nearly 73% of people in extreme poverty, with this figure projected to rise to 86% by 2030 [OECD 2022b].

non-discrimination, investment promotion, competition policy, enterprises law, private-public partnerships." In reality, this code is assigned to projects of various types. Thus, for example, the OECD project-level data on the ODA from the largest world donor—the United States—in the area of "business policy and administration" in 2022 includes, among other things, the following activities:

- KosovoUp To Youth project in Kosovo, aimed at reaching out to vulnerable youth exposed to social exclusion, by mobilizing and empowering them to affect positive change;
- English language training for local government employees in Serbia;
- "Visit Tunisia" program, aimed at "capitalizing on the country's rich natural, cultural and historical endowments to develop a diversified and high-quality sector that supports broad-based economic growth";
- support for ICT centers of excellence and high profit agro-productions in Moldova, etc. [OECD 2024b].

Similar discrepancies (between the nature of the implemented activity and the CRS purpose code assigned to it) can be found in quite a large number for any other relevant sector. This means that in order to calculate correlations between aid volumes and the level of political risk in recipient countries, it would be necessary to double-check manually the correctness of sectoral coding of each individual project by those responsible for reporting ODA to the OECD. This is an extremely time-consuming exercise, the value of which is also highly questionable.

3. Challenges in assessing the mitigating effect of development guarantees

It is hypothetically possible to measure statistically the mitigating effect of development guarantees, for which, as already noted, it has been decided to calculate an ODA-reportable grant equivalent. In order to make such a measurement, it is important, first of all, to distinguish between the parameters of possible impact (damage) from risk and the likelihood of its materialization.

It is obvious that the parameters of political risks perceived by the investor will be influenced by the very fact of guaranteeing compensation for possible losses, which, in fact, determines the catalytic effect of guarantee instruments. In purely financial terms, the mitigating effect of guaranteeing for one investment project worth $1 billion and for 10 projects worth $100 million each—under identical coverage conditions—will be the same in our understanding. However, in order to correctly interpret the data on the volume of such guarantees (and/or capital mobilized with them) in terms of their impact on investors' perception of risks, it is necessary to know the specific terms and conditions of guarantees. This applies both to the scope of the risks covered and to the proportion of losses compensated by the guarantor (which may differ by many percentage points).

The issue of quantifying the contribution of guarantee instruments to reducing the probability of *materialization* of political risks through the so-called "halo effect" deserves special attention. This effect affects risks of "legal-governmental" origin, and,

accordingly, it is crucial for the researcher to know not only the volume of guarantees but also its exact terms (coverage).

However, a correlation of a sheer volume of guarantees extended with The PRS Group's ICRG political risk rating, such as that described in the previous section for conventional ODA instruments, is hardly possible. Although ICRG's political risk rating contains an "investment profile" component (comprising three elements: contract viability/expropriation; profits repatriation; and payment delays), calculating the correlation between it and a volume of investment guarantee makes no sense.

Guaranteeing creates a "halo effect" for a specific project, while The PRS Group's ICRG rating (or any other rating of the same type) assesses the relevant risks on a country-wide scale and without regard to the industry specifics.

The most accurate information on the strength of the "halo effect" can be provided by information on activated (called) guarantees. It is important to know what proportion of supported projects faced such serious risks that the guarantee was activated (called), and how many conflicts with host country authorities (if the risks had materialized) were resolved through the intervention of the home country authorities.

However, such techniques for assessing the mitigating effect of guarantees/insurance remains impractical. The issue in this case is, regrettably, considerably more trivial than in the case of conventional ODA instruments. It consists of the fundamental absence of the statistical data of adequate volume and quality.

For an extended period of time, the OECD data on the utilization of guarantee instruments reflected only activated guarantees (in case of materialization of the risks covered by them), which were reported as other official flows [OECD 2023c. P. 5]. Since 2012, the volume of capital mobilized by guarantee instruments has been systematically documented, including detailed data on beneficiary countries and sectors. However, the data does not allow for the determination of the country of origin of the company to which the guarantee coverage was provided, or—most importantly—the type of risk against which the investor (or the lending institution) is protected. In 2023, a series of modifications to statistical reporting were made. In addition to the amount of funds mobilized, it was decided to calculate the grant-equivalent of those guarantees that support projects that are primarily focused on promoting development in ODA recipient countries, meet the criteria of financial and developmental additionality, and have a maturity of more than one year.

A consensus was reached about the need for enhanced reporting from guarantee providers. To this end, the template to be completed by donors has been expanded to encompass more than 50 items.

However, even when the transition to more granular reporting is implemented, and assuming that most donors will provide data in the new format, the raw data cannot be used to assess the contribution of guarantees to mitigating political risks to business. The new template does not make investors indicate which specific risks a particular guarantee protects them against. Available data indicates that a considerable proportion of guarantees encompass either commercial risks or both commercial and political risks. Consequently, quantitative data on the amount of guarantee coverage and the amount of funds mobilized through guarantees cannot be used "as is." The only solution is to rely

on data from national agencies. However, such data is characterized by a high degree of fragmentation, including with regard to the specific terms and conditions of guarantees.

Despite the availability of the necessary numerical indicators in international statistics, the issue of the simultaneity bias remains unavoidable, particularly in the context of guarantee instruments. On the one hand, a higher percentage of FDI in fragile and conflict-affected states has insurance coverage than in other low-income countries (6.2% vs. 3.8%) [US International Development Finance Corporation 2023, p. 24]. Conversely, the volume of guarantee coverage for projects in the most high-risk jurisdictions remains minimal, as does the volume of capital mobilized through guarantees. According to the OECD data from 2018 to 2020, this group of recipients accounted for only 24% of total funds mobilized [OECD 2023b. P. 17].

The current international environment engenders uncertainty regarding the trajectory of these indicators. On the one hand, companies themselves remain cautious about investing in high-risk jurisdictions. However, we observe that providers of development cooperation are making concerted efforts to attract private capital to regions, countries, and sectors that are deemed to be of geopolitical and geo-economic importance. This includes regions and countries with high political risk, where private capital is particularly scarce. These efforts include both persuading national investors and subsidizing guarantee fees.

Therefore, it is not inconceivable that the magnitude of ODA-reportable development guarantee expenditures by donor states would be predetermined by the level of political risks to a greater extent than vice versa.

Conclusion

Private companies and their respective countries of origin share a vested interest in optimizing the utilization of international development assistance resources to mitigate the political risks that render investment in developing countries particularly challenging. The specific instruments employed in this process, such as conventional ODA instruments and guarantee instruments, are determined by the risk management strategy selected.

The mitigating effect of conventional ODA instruments could be theoretically quantified. The predictor could be the individual sectors of ODA most relevant in terms of their impact on political processes in the recipient country and the factors determining them. The regressor could be some numerical indicators from political risk ratings correlated with these sectors. In the context of guarantee instruments, it is possible to measure their direct catalytic effect, based on the amount of capital mobilized, and the "halo effect"—protection against risks of "legal-governmental" origin—by calculating the share of projects where such an effect did not work and investors suffered losses.

However, there are several insurmountable limitations to the application of quantitative methods. In the context of conventional ODA instruments, the primary challenge lies in simultaneity bias, as well as the presence of a multitude of exogenous and endogenous factors influencing both aid volumes and political risk parameters. A significant proportion of these factors can only be captured through the use of dummy

variables. As for the guarantee instruments, the measurement of their direct catalytic effect and the magnitude of the "halo effect" is predominantly impeded by the substantial fragmentation and imprecision inherent in source data. The determination to calculate the grant-equivalent for guarantees and make them partly ODA-reportable has not yet rectified this issue.

This observation underscores the complexity of assessing the mitigating effect of ODA-eligible flows on political risks solely based on quantitative data. It highlights the necessity of employing qualitative methods that encompass a wide array of complementary sources of various types. A comprehensive case study can facilitate the identification of the most suitable combination of analytical tools. This analysis should encompass not only the numerical data on ODA from the OECD databases or from political risk ratings, but also the subtle characteristics of the development finance provided, its terms and conditions, and the dynamic changes in the context and political risk factors in the host country and its relationship with the outside world. The selection of genuinely interesting and representative cases is a non-trivial task and may help identify new solutions that could pave new paths in the study of this topic.

Bibliography

Baranovskii, V.G., Kvashnin, Yu.D., Taganova, N.V. (eds.), 2018. *International development assistance as foreign policy tool: Foreign experience*. Moscow: IMEMO Publ., https://doi.org/10.20542/978-5-9535-0548-2 (in Russian).

Bartenev, V.I., 2023a. Foreign Aid's Effect on Political Risks for Foreign Direct Investment. *MGIMO Review of International Relations*, vol. 16, no. 5, pp. 155-188, https://doi.org/10.24833/2071-8160-2023-5-92-155-188 (in Russian).

Bartenev, V.I., 2023b. International development cooperation and political risks for transnational business: Linking research topics. *Lomonosov World Politics Journal*, vol. 15, no. 1, pp. 133–163, https://doi.org/10.48015/2076-7404-2023-15-1-133-163 (in Russian).

Bertrand, O., Betschinger, M.A., 2024. Exploring the relationship between development aid and FDI from developed countries in developing countries: empirical insights from Japanese firm-level data. *Journal of International Business Studies,* 2024, vol. 55, pp. 782–795, https://doi.org/10.1057/s41267-024-00688-5

Degterev, D.A., 2012. International Development Assistance as a Tool to Promote Foreign Policy and Foreign Economic Interests. *MGIMO Review of International Relations*, no. 2 (23), pp. 47–58 (in Russian).

Gomboin, Z.E., 2023. The PRC's Foreign Aid to Developing Countries as a Tool to Protect Chinese Companies' Investments against Political Risks. *Far Eastern Studies*, no 6, pp. 48–58. https://doi.org/10.31857/S013128120028881-0 (in Russian).

Morozkina, A.K., 2018. *Bilateral official development assistance: Impact of the 2008–2009 global financial crisis*. PhD Thesis. Moscow (in Russian).

Ali, T. et al., 2021. International projects and political risk management by multinational enterprises: insights from multiple emerging markets. *International Marketing Review*, vol. 38, no. 6, pp. 1113–1142, https://doi.org/10.1108/IMR-03-2020-0060

Asiedu, E., Jin, Y., Nandwa, B., 2009. Does foreign aid mitigate the adverse effect of expropriation risk on foreign direct investment? *Journal of International Economics,* vol. 78, no. 2, pp. 268–275, https://doi.org/10.1016/j.jinteco.2009.03.004

Bahoo, S., Alon, I., Floreani, J., Cucculelli, M., 2023. Corruption, formal institutions, and foreign direct investment: The case of OECD countries in Africa. *Thunderbird International Business Review*, vol. 65, no. 5, pp. 461–483, https://doi.org/10.1002/tie.22361

Bandyopadhyay, S., Sandler, T., Younas, J., 2014. Foreign direct investment, aid, and terrorism. *Oxford Economic Papers*, vol. 66, no. 1, pp. 25–50, https://doi.org/10.1093/oep/gpt026

Berthélemy, J. C., 2006. Bilateral donors' interest vs. recipients' development motives in aid allocation: Do all donors behave the same? *Review of Development Economics*, vol. 10, no. 2, pp. 179–194, https://doi.org/10.1111/j.1467-9361.2006.00311.x

Choi, W., Chung, C.Y., Wang, J., 2022. Firm-level political risk and corporate investment. *Finance Research Letters*, 46, 102307, https://doi.org/10.1016/j.frl.2021.102307

Custer, S. et al, 2023. *Tracking Chinese development finance: An application of AidData's TUFF 3.0 Methodology*. Williamsburg, VA: AidData at William & Mary. Available at: https://www.aiddata.org/data/aiddatas-global-chinese-development-finance-dataset-version-3-0 (accessed 10 September 2024).

Dreher, A., Lang, V., Reinsberg, B., 2024. Aid effectiveness and donor motives. *World Development,* vol. 176, https://doi.org/10.1016/j.worlddev.2023.106501

Efobi, U., Asongu, S., Beecroft, I., 2018. Aid, terrorism, and foreign direct investment: Empirical insight conditioned on corruption control. *International Economic Journal*, vol. 3, no. 4, pp. 610–630, https://doi.org/10.1080/10168737.2018.1549089

Fon, R., Alon, I., 2022. Governance, foreign aid, and Chinese foreign direct investment. *Thunderbird International Business Review*, vol. 64, no. 2, pp. 179–201. https://doi/org/10.1002/tie.22257

Godfrey, P.C., Merrill, C.B., Hansen, J.M., 2009. The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic management journal*, vol. 30, no. 4, pp. 425–445.

Hoeffler, A., Justino, P., 2023. Aid and fragile states. WIDER Working Paper 2023/83. Helsinki: UNU-WIDER, https://doi.org/10.35188/UNU-WIDER/2023/391-8

Institute for Economics and Peace, 2017. Measuring peacebuilding cost-effectiveness. Available at: https://ods.ceipaz.org/wp-content/uploads/2018/06/Measuring-Peacebuilding_WEB.pdf (accessed 10 September 2024).

Jin, Y., Zeng, Z., 2017. Expropriation and foreign direct investment in a positive economic theory of foreign aid. *Economic Theory*, vol. 64, no. 1, pp. 139–160, https://doi.org/10.1007/s00199-016-097

Kennedy, C.R., 1987. *Political risk management: International lending and investing under environmental uncertainty*. New York: Quorum Books.

Lu, J., Huang, X., Muchiri, M., 2017. Political risk and Chinese outward foreign direct investment to Africa: The role of foreign aid. *Africa Journal of Management*, vol. 3, no.1, pp. 82–98, https://doi.org/10.1080/23322373.2016.1275941

OECD, 2024a. Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire. 4 September 2024. Available at: https://one.oecd.org/document/DCD/DAC(2024)40/FINAL/en/pdf

OECD, 2024b. Creditor Reporting System: Aid activities. OECD International Development Statistics (database). 2024, https://doi.org/10.1787/data-00061-en

OECD, 2024c. DAC and CRS List of codes. Updated on 14/06/2024. Available at: https://web-archive.oecd.org/temp/2024-06-19/57753-dacandcrscodelists.htm (accessed 10 September 2024).

OECD, 2024d. INCAF Facts and Figures Series: ODA final data and trends for 2022 in relation to fragile and conflict-related contexts. 22 January 2024. Available at: https://one.oecd.org/document/DCD/DAC/INCAF(2024)1/en/pdf (accessed 10 September 2024).

OECD, 2022a. Report on the Implementation of the DAC Recommendation on Untying Official Development Assistance. 5 September 2022. Available at: https://one.oecd.org/document/DCD/DAC(2022)34/FINAL/en/pdf (accessed 10 September 2024).

OECD, 2022b. States of Fragility 2022. Paris, OECD Publishing, https://doi.org/10.1787/c7fedf5e-en.

OECD, 2023a. Peace and official development assistance. *OECD Development Perspectives*, No. 37. Paris: OECD Publishing, https://doi.org/10.1787/fccfbffc-en.

OECD, 2023b. Private finance mobilised by official development finance interventions. *OECD Development Perspectives*, No. 29. Paris: OECD Publishing, https://doi.org/10.1787/c5fb4a6c-en.

OECD, 2023c. Private sector instruments: treatment of credit guarantees. 6 March 2023. Available at: https://one.oecd.org/document/DCD/DAC/STAT(2022)50/REV1/en/pdf (accessed 10 September 2024).

OECD/WTO, 2015. Aid-for-trade related CRS purpose codes by category. In: *Aid for trade at a glance 2015: Reducing trade costs for inclusive, sustainable growth*. Geneva: WTO; Paris: OECD Publishing. Pp. 455–459, https://doi.org/10.1787/aid_glance-2015-en.

The PRS Group, 2022. The ICRG Methodology. Available at: https://www.prsgroup.com/wp-content/uploads/2022/04/ICRG-Method.pdf (accessed 10 September 2024).

US International Development Finance Cooperation, 2023. Annual Report 2023. Available at: https://www.dfc.gov/sites/default/files/media/documents/DFC%20FY23%20Annual%20Report.pdf (accessed 10 September 2024).

Van der Veen, A., 2011. *Ideas, Interests and Foreign Aid*. Cambridge; New York: Cambridge University Press.

Wang, H., Yang, H., Li, F., Zhang, M., 2022. Does foreign aid reduce the country's risk of OFDI? The Chinese experience. *International Studies of Economics*, vol. 18, no. 2, pp. 238–258, https://doi.org/10.1002/ise3.20

Factor Analysis of the Causes of the Uneven Economic Impact of the COVID-19 Pandemic

Garik Petrosyan, Irina Petrosyan, Heghine Petrosyan

Garik Petrosyan — PhD in Economics, senior lecturer at the Russian-Armenian University (Yerevan, Armenia).

ORCID: 0000-0002-4711-7615

Irina Petrosyan — PhD in Economics, head of the Department of Economic Theory and Issues of Transition Period of the Russian-Armenian University (Yerevan, Armenia).

ORCID: 0000-0001-7966-8211

Heghine Petrosyan — PhD in Economics, senior lecturer at the Russian-Armenian University (Yerevan, Armenia).

ORCID: 0000-0003-3939-8426

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Abstract

This study analyzes the uneven economic impact of the COVID-19 pandemic in different countries and identifies the factors that influence the size of these losses. The study used econometric models to estimate economic losses in 2020 and cumulative losses for 2020–2021. The main groups of factors included macroeconomic indicators, macroeconomic policy measures, institutional indicators, and healthcare system indicators. Also, the estimates used the structure of the economy as a control variable. The results show that traditional monetary instruments did not have a significant impact in mitigating the economic effects of the crisis in 2020, while fiscal measures significantly contributed to the recovery of the economies in 2021. Institutional factors such as the efficiency of public administration and the level of corruption control also played an important role in reducing economic losses. Additionally, the impact of economic structure factors and health system capacity on the magnitude of economic losses due to the pandemic was analyzed. However, not all of the relationships between healthcare system efficiency factors and economic losses were as expected, and the analysis revealed that poor healthcare system efficiency can have significant negative economic consequences.

Introduction

The global economy experienced a significant impact due to the outbreak of COVID-19 which led to a dramatic economic downturn and unprecedented challenges for countries worldwide. The measures implemented to curtail the propagation of the virus, including quarantine and travel restrictions, resulted in diminished economic activity, elevated levels of unemployment, and reduced consumer spending. Concurrently, the economic repercussions of the pandemic exhibited disparities in their distribution, with certain nations experiencing greater impact than others. This necessitated a thorough examination of the factors contributing to these variations. For instance, developing countries such as India and Brazil experienced considerable economic hardship due to high levels of informal employment and inadequate social protection. At the same time, developed countries such as the US and Germany have suffered significant losses despite extensive fiscal and monetary support measures. It has been demonstrated by certain studies that institutional sophistication and macroeconomic stability are also of significance in terms of mitigating the economic impact of the pandemic [Ghecham 2022]. For instance, countries exhibiting elevated levels of macroeconomic stability and the implementation of effective government policies, such as South Korea and New Zealand, demonstrated a more expeditious recovery from the initial economic downturn [OECD 2021].

In our previous study, the economic impacts of the pandemic were analyzed, and the results published in the article entitled "Unevenness in the Economic Impact of the COVID-19 Pandemic: The Depth of the Economic Decline in Different Countries and the Factors that Caused It" [Petrosyan 2023]. Economic losses in 2020 and cumulative losses for 2020–2021 due to the pandemic were also calculated. Subsequently, an econometric

evaluation was conducted to ascertain the impact of various indicators on the value of economic losses in different countries worldwide. The study encompassed three distinct groups of factors. Firstly, indicators of macroeconomic sustainability were analyzed. Secondly, macroeconomic policy factors were examined. Thirdly, factors describing the degree of institutional development of countries were investigated.

The study's primary findings indicated that macroeconomic policy measures, including alterations in interest rates and the magnitude of monetary stimulus, exerted minimal influence in mitigating the economic consequences of the crisis experienced in 2020. This phenomenon can be attributed to the fact that, in the context of supply constraints triggered by the pandemic, traditional monetary instruments were found to be less effective. However, fiscal policy measures, including direct transfers, subsidies and tax incentives, significantly contributed to the recovery process of national economies in 2021 and reduced the magnitude of aggregate losses in 2020–2021. The efficiency of public administration, the level of corruption control and the quality of the regulatory framework were also found to be significant factors. It is evident that countries exhibiting elevated levels of institutional sophistication, such as New Zealand and Finland, demonstrated superior recovery rates. This observation serves to underscore the pivotal role that robust institutions play in crisis management, particularly in mitigating the detrimental consequences of economic downturns.

The results of the above study emphasized the importance of macroeconomic stability and developed institutions in mitigating the economic impact of the pandemic and accelerating economic recovery. However, the analysis also demonstrated that the impact of macroeconomic factors and government policies on economic losses in 2020 was mixed and required further in-depth assessment. This necessitates an expansion of the range of factors incorporated into the analysis, thereby facilitating a more comprehensive understanding of the underlying causes of variations in economic losses across different nations.

The present study, conducted for the period 2020–2021, proposes to supplement the list of factors included in the previous analysis with two new groups: factors of economic structure and healthcare system efficiency. The necessity to incorporate these factors is substantiated by the observation that an economy's structural economic framework and its capacity to function effectively within the healthcare system are pivotal in determining its sustainability to external shocks, such as a pandemic. The economic structure, characterized by the contribution of diverse sectors to Gross Domestic Product (GDP), the extent of diversification, and the reliance on foreign trade and tourism, serves as a crucial determinate in the degree to which individual sectors of the economy will be impacted by the imposition of restrictive measures. The capacity of healthcare systems is a critical factor in determining the effectiveness of healthcare interventions. This capacity encompasses various elements, including the number of hospital beds available, the number of medical personnel, and the level of financial support for healthcare. The capacity of the health system to manage the influx of patients exerts a direct influence on economic activity and public confidence. It has been demonstrated that countries with well-funded and well-equipped health systems, such as Germany and Japan, were able to control the spread of the virus more

effectively and reduce mortality, which in turn helped to mitigate the economic impact of the pandemic [Ghecham 2022].

Consequently, broadening the analysis to encompass factors of economic structure and health system capacity will facilitate a more comprehensive evaluation of the underlying causes of variations in economic losses between nations during the course of the pandemic. The present study will contribute to a more profound comprehension of the consequences of the pandemic, whilst concomitantly offering a series of recommendations for enhancing the resilience of economic systems in the face of future crises.

1. Literature review

Numerous studies have demonstrated a positive correlation between population health and economic well-being, as well as growth [McKibbin, Fernando 2020]. The global pandemic evolved from healthcare and economic crisis into a systemic crisis with the potential to exert long-term consequences on the domestic development and international trade relations of nations [UNDP 2021].

The repercussions of the COVID-19 pandemic manifested in diverse patterns across national borders and industrial sectors. The tourism industry experienced the most significant damage due to border closures, while Internet commerce flourished as more people purchased goods online because retailers were compelled to close their stores during the pandemic [Dyvik 2024]. The repercussions of the coronavirus have been demonstrated to engender a decline in interest rates [Jawad, Naz 2023], increase in unemployment [Laikam, Bikbaeva, Pavlova 2021], and a contraction in international trade [Shuyskiy 2021]. However, a salient point emerges from this analysis: certain nations managed to avoid substantial losses, while others did not. A considerable body of research has been dedicated to the examination of the underlying causes of these disparities.

As documented in [Alon, Kim, Lagakos, Van Vuren 2022], the decrease in GDP per capita in 2020 compared to 2019 in developed countries was 2.4%, in developing countries was 6.7%, and in low-income countries was 3.6%. The researchers of the study sought to identify the factors that contribute to the significant variations observed among countries in the aforementioned indicators. Among the factors evaluated in the analysis, the most significant, in quantitative terms, are the volume of public transfer programs, age demographics, and the sectoral structure of employment. The majority of the observed losses in Gross Domestic Product (GDP) and elevated mortality rates in emerging market countries can be attributed to low levels of public financial assistance and a high share of jobs that require social interaction. Low-income countries experienced adverse effects due to inadequate public transfers; however, these negative effects were mitigated to a considerable extent by younger populations with greater disease resilience and a substantial agricultural sector, which offers a reliable source of income during periods of quarantine.

Policy can play a pivotal role in influencing the course of both individual and collective health, particularly in the context of global disasters such as the COVID-19 pandemic [Su 2021]. And “good” policies encompass not only governmental actions but also voluntary, self-protective changes in individual behavior, potentially precipitated

by government information campaigns [NBER 2020]. However, as [World Bank 2022] rightly points out, in contrast to other crises, the pandemic was met with extensive and decisive economic policy measures to minimize the human losses. Concurrently, these measures engendered new risks, including precipitously elevated levels of private and public debt within the global economy.

A number of studies have been conducted to ascertain the existence of a correlation between mortality and various economic indicators, including GDP and unemployment rates. The analysis revealed that the majority of countries, regions, and cities can be categorized into one of two groups: (1) those experiencing significant GDP loss and high mortality, exemplified by New York, Lombardy, and the UK, or (2) those demonstrating low GDP loss and low mortality, including Germany, Norway, and Kentucky. However, there were a few notable exceptions to this trend, including the state of California and Sweden. The authors also provide a rationale for these discrepancies, attributing them to government policy. Nations that effectively contained the virus from the outset were able to sustain economic activity and minimize mortality rates [NBER 2020]. At the same time, different countries had different financial capacities, and as a result, those countries with higher levels of financial capacity were able to overcome the crisis more effectively [Rodygina and Musikhin 2020].

An alternative perspective on the issue is presented in [Kizilov 2020]. This study posits that Germany's ability to navigate the recent economic downturn with minimal impact can be attributed to a conducive environment for entrepreneurship and a relatively low debt burden. In 2020, Germany exhibited the lowest level of gross public debt relative to GDP among the G7 countries, as well as the lowest growth rate of public debt. Consequently, the nation not only evaded a downturn in retail sales but also, as indicated by the study, exerted its influence on the dynamics of its neighboring countries, thereby ensuring analogous outcomes in those nations.

In particular, African countries that were dependent on foreign humanitarian aid experienced significantly greater hardship. An analysis of ten African countries demonstrated an increase in their debt-to-GDP ratios, with certain countries surpassing 100%. Furthermore, there has been a decline in FDI, particularly in oil-producing countries, and a reduction in various forms of humanitarian assistance. Accordingly, the economic and political uncertainty experienced by these countries has been noted as having increased [OECD 2021].

A similar trend was observed in all EAEU countries, with a decline being evident in the majority of industries. Concurrently, the impact on a specific nation and industry exhibited variability, contingent upon the initial indicators. For instance, Armenia witnessed a deterioration in its unemployment rate [UNECE 2021], which was already relatively high, while other EAEU countries did not experience a comparable increase in unemployment. In the context of Belarus, the prevailing uncertainty has led to a precipitous decline in investment in fixed capital, amounting to a 6.8 percentage point decrease. Meanwhile, in Russia and Kazakhstan, the consolidated budget deficit increased due to the decline in commodity prices within global markets. The recovery process may vary in speed depending on the economic structure of the country [Selishcheva 2021].

A comprehensive review of the extant literature on the subject was conducted in order to ascertain the factors that influenced the economic losses sustained by countries as a result of the COVID-19 pandemic.

2. Research methodology

The objective of this study is to evaluate the factors that contribute to economic losses resulting from the COVID-19 pandemic. The analysis will be expanded to incorporate new variables that describe the economic structure and capacity of the healthcare system.

A methodological approach was employed that entailed a comparison of real and predicted GDP values, the purpose of which was to estimate the economic losses caused by COVID-19 pandemic. The IMF's October 2019 forecasts for 2020 and 2021 were used to estimate anticipated economic growth. The selection of this period was predicated on the observation that the predominant economic consequences of the pandemic occurred in 2020, with 2021 signifying a period of economic recovery. Therefore, it is also possible to consider the potential lag effects of economic and social measures implemented in 2020. The data from 2019 were used solely for the calculation of the growth rate in 2020, and were excluded from the regression equations. The real GDP data for these years was also obtained from the IMF databases. The real GDP index was calculated by taking the value of real GDP in 2017 and setting it to 100. The projected real GDP index and the actual real GDP index for 2020 and 2021 were determined using projected and actual growth, respectively. The economic losses were calculated as the difference between the projected and actual values of real GDP. For instance, in the Republic of Armenia, the projected GDP growth for 2020 was 4.8%, and for 2021, it was 4.5%. However, the actual GDP growth in 2020 was -7.2%, and in 2021, it was -5.7%. The projected GDP index for 2020 and 2021 was 118.6 and 124.0, respectively, while the actual GDP index for the same years was 105.0 and 111.0. According to Petrosyan (2023), Armenia's economic losses in 2020 amounted to 13.6 and 13.0 of the GDP index in 2021, which, when combined, yielded 26.6 of the GDP index. This approach enables the consideration of the discrepancy between anticipated and actual economic growth, thereby facilitating a more precise estimation of the economic losses associated with a pandemic.

Following an estimation of the economic losses incurred, an analysis was conducted to determine which indicators had a significant impact on the magnitude of the economic losses. This analysis involved the examination of the effects of various factors. To this end, regression analysis was employed, utilizing data from 2020 and 2021. Given that the analysis was conducted over a two-year period (with a longer time period not being feasible due to the potential impact of factors other than the pandemic on the results), two models were developed for each year individually. The least squares method was employed to estimate these models. A comprehensive set of explanatory variables was considered, including macroeconomic factors (e.g., GDP per capita, inflation, public debt, current account balance, economic openness indicator, unemployment, investment, and savings), public policy factors (e.g., fiscal policy response, monetary policy response, anti-epidemic severity index, and economic support index), and institutional factors (e.g., the level of corruption

control, government effectiveness, political stability and absence of violence and terrorism, and legal support). In addition to these data, data on the structure of the economy as a control variable, as well as data on the effectiveness of the health system, among others, are used for the extended analysis:

- health care costs and health care resources;
- life expectancy and mortality rates;
- mortality from specific causes;
- mortality by age group and sex;
- sanitation and population.

Regression models are used for the purpose of conducting a comprehensive analysis, with the objective being the assessment of the impact that a multitude of factors exert on the economic losses experienced by various nations. The dependent variable will be the amount of economic losses expressed as a percentage of GDP. This will be estimated using the methodology previously presented and described in greater detail in the authors' prior article [Petrosyan 2023]. The independent variables, which are defined as the parameters describing the economic structure and capacity of the healthcare system, will be included in the study.

The econometric model constructed for the estimates is as follows:

$$Y_t = \beta_o + \beta_1 \times X_{1t} + \beta_2 \times X_{2t} + \varepsilon_t ,$$

where:

Y_t is the dependent variable (economic losses as a percentage of GDP in 2020 or cumulative losses in 2020–2021),

X_{1t} and X_{2t} are independent variables (macroeconomic factors, fiscal and monetary policy, institutional performance, etc.),

β_o is a constant,

β_1 and β_2 are coefficients on the independent variables,

ε_t is the model error.

The regression analysis identified significant determinants of economic losses, such as fiscal policy measures and institutional effectiveness. All coefficients of the estimated regression models are included in the table in the appendix.

The analysis was conducted using multiple regression, which allowed us to determine the impact of each group of factors on the value of economic losses. The inclusion of new factors in the model is aimed at obtaining a more comprehensive and accurate analysis of the causes of differences in economic losses between countries.

1. **Multiple regression.** Inclusion of several independent variables in the model allowed us to assess their impact on the dependent variable and identify the most significant determinants of economic losses, taking into account the structure of the economy.
2. **Hypothesis testing.** Significance tests of regression coefficients were conducted to determine statically significant factors.
3. **Model diagnosis.** To ensure the reliability of the results, tests for multicollinearity, autocorrelation and heteroscedasticity were performed.

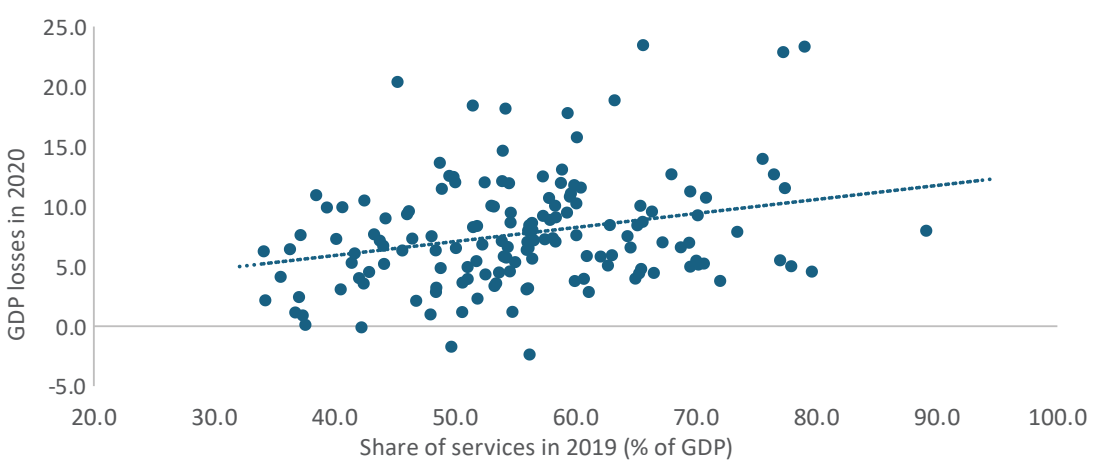
Different subsamples of data and alternative model specifications were used to test the robustness of the results. This made it possible to verify the robustness of the findings and their applicability to different countries and time periods.

3. Analysis and results

The COVID-19 pandemic had a significant impact on the global economy, causing unprecedented economic losses in various countries. A critical component of the analysis entails the examination of factors that may have mitigated or amplified these losses. One such factor is the structure of the economy, particularly the share of the services sector in the Gross Domestic Product (GDP). This study aims to identify the relationship between the share of services in GDP and the economic losses incurred by countries in 2020 due to the COVID-19 pandemic. As illustrated in Figure 1 (p. 29), countries with a higher share of services in GDP experienced greater economic losses. This finding underscores the heightened vulnerability of the services sector to pandemic shocks and highlights the necessity for economies to develop resilience in the face of such crises. The regression analysis between these variables also substantiates the relationship, thereby enabling its utilization as a control variable.

It is noteworthy that the proportion of the services sector in GDP exhibited a robust correlation with the magnitude of economic losses incurred during the year 2020. However, this correlation was not observed when considering the cumulative losses experienced from 2020 to 2021. This phenomenon can be attributed to the significant impact of the restrictions and social distancing measures implemented in 2020 on the services sector, particularly industries such as hospitality, tourism, and retail trade. Nevertheless, the speed of economic recovery in 2021 was contingent on a variety of factors, including fiscal policy and institutional sophistication. These factors will be discussed in greater detail in the following sections.

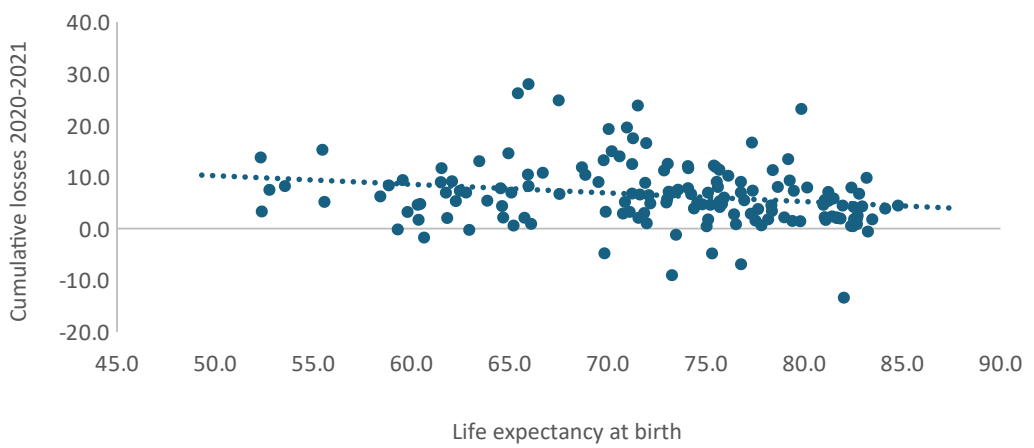
Figure 1. Relationship between the share of services (% of GDP) and GDP losses



Source: authors' calculations.

The relationship between health performance indicators and economic losses due to the COVID-19 pandemic is not unambiguous. Life expectancy is frequently regarded as an indicator of population health and the quality of the health care system. As illustrated in Figure 2 (p. 30), a negative correlation is evident between life expectancy and total GDP losses incurred during the 2020–2021 period. Consequently, nations with higher life expectancies exhibited diminished economic losses. This outcome suggests that the presence of more advanced health care systems and the overall well-being of the population may have contributed to the reduction of the economic consequences of the pandemic. These findings underscore the importance of investing in health and social programs to increase economic resilience in global crises.

Figure 2. Relationship between life expectancy and total GDP losses



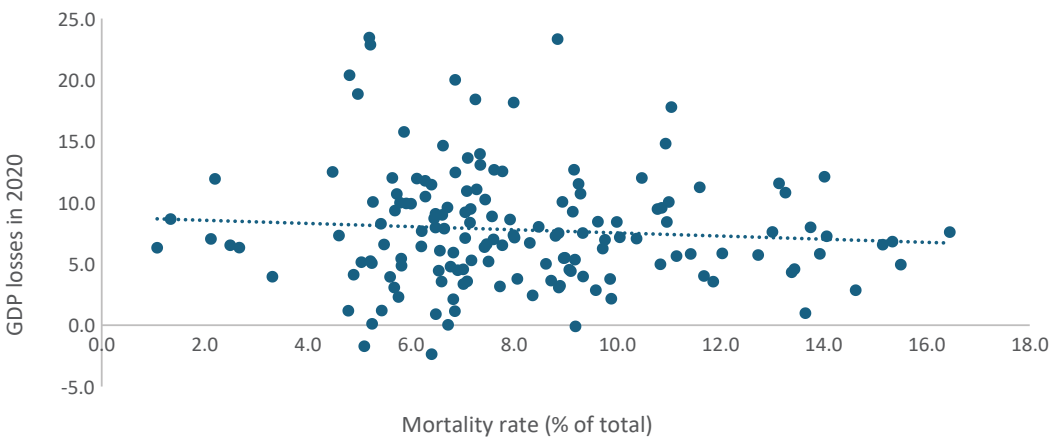
Source: authors' calculations.

Conversely, mortality rates and their components, including the lifetime risk of maternal mortality and mortality rates associated with household and outdoor air pollution, exhibit an inverse relationship. In general, nations with elevated mortality rates demonstrated reduced economic losses during the course of the pandemic. This outcome is noteworthy in light of the correlation between high mortality rates and the fragility of health systems. It can be posited that a shock of the magnitude of the ongoing pandemic should have led to an exacerbation of vulnerabilities, resulting in increased challenges for the labor force and greater economic losses. However, in practice, these countries experienced lower losses, as illustrated in Figure 3 on p. 31 (also confirmed by regression analysis, see Appendix, Table 3).

This phenomenon can be attributed to their diminished sensitivity to variations in the public health system and their propensity to operate in environments characterized by disease transmission. Consequently, the emergence of a new disease did not result in heightened security measures, leading to a reduction in restrictions on economic activity (see Figure 4 on p. 31).

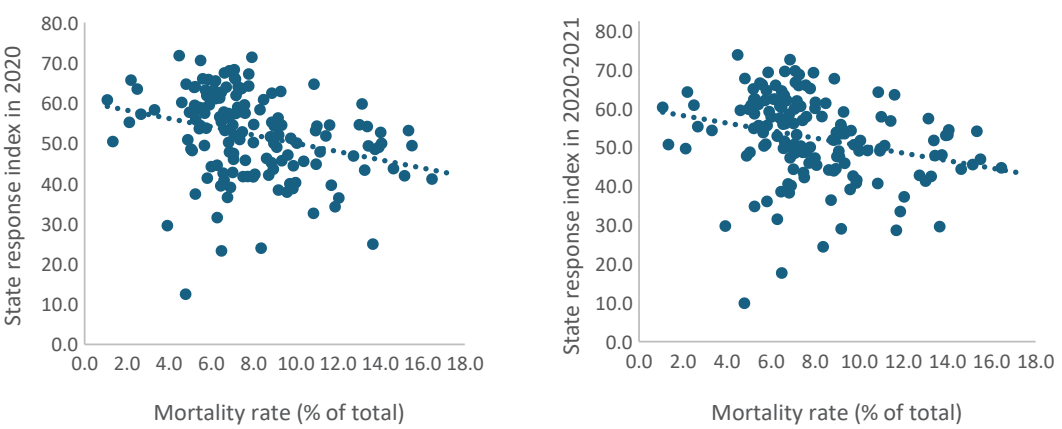
Conversely, countries with higher mortality rates demonstrated a more protracted recovery in 2021, resulting in increased cumulative economic losses. The findings indicate that the implementation of fewer quarantine restrictions in 2020 contributed to a reduction in economic losses during that period. However, subsequent analyses have revealed that these restrictions also exerted long-term effects, giving rise to increased cumulative losses in the 2020–2021 period.

Figure 3. Relationship between mortality rates and GDP losses in 2020



Source: authors' calculations.

Figure 4. Relationship between mortality rate and state response index to pandemic shock



Source: authors' calculations.

The impact of macroeconomic, institutional, and fiscal factors was assessed using the share of the service sector in the economy as a control variable. The results of this model specification demonstrate that monetary policy measures are not associated with the

magnitude of economic losses incurred in 2020 and the cumulative losses experienced during the period from 2020 to 2021. The impact of fiscal policy was negligible in 2020; however, it played a pivotal role in mitigating accumulated losses during the 2020–2021 period. This is due to the time required for fiscal policy measures, such as stimulus packages and government spending, to be implemented and propagate throughout the economy. Despite the fact that the immediate effects were limited in 2020, sustained fiscal support helped stabilize the economies and mitigate accumulated losses over the two-year period.

The size of the public sector, as measured by the ratio of revenues to GDP and expenditures to GDP, did not play a significant role in economic efficiency in both 2020 and 2021. The aggregate size of the public sector does not necessarily reflect the efficiency or effectiveness of government interventions during the crisis. It is imperative to consider factors such as the swiftness and precision of fiscal measures, rather than merely the extent of government activity.

The expenditure patterns exhibited a substantial influence on the magnitude of losses, manifesting distinct effects in 2020 and 2021. For instance, the correlation between the share of investment as a percentage of GDP and economic losses in 2020 was found to be statistically significant, while this correlation was not significant in 2021. Conversely, the share of savings as a percentage of GDP was found to be important for economic performance in both 2020 and 2021. Investment spending likely provided immediate support to the economy, creating jobs and stimulating demand in 2020. However, as economies adapted in 2021, the role of savings, reflecting the financial strength and purchasing power of households and businesses, became more critical for sustaining economic efficiency.

A substantial correlation has been demonstrated between external stability, as measured by the current account balance, and economic losses. In the aftermath of the global economic downturn, countries with more positive (or less negative) current account balances demonstrated a reduced degree of economic loss during the 2020 and 2021 periods. A positive current account balance is indicative of a robust external demand for a nation's goods and services, thereby offering a cushion against domestic economic turbulence. Countries with healthier external balances were better prepared to withstand the economic shocks of the pandemic.

Institutional factors also exerted a positive influence on economic efficiency. In the context of the global economic landscape, nations that exhibit minimal corruption and optimal government efficiency have demonstrated a tendency to incur diminished economic losses in 2020 and to undergo a more expeditious recovery in 2021. The capacity of governments to implement effective policies and ensure efficient resource allocation is enhanced by strong institutions. Countries with superior governance and reduced corruption levels exhibited greater success in addressing the crisis and achieving economic recovery more expeditiously.

In the 2020–2021 period, health and mortality indicators exerted a substantial influence on the economic consequences, leading to notable GDP losses. Therefore, it can be concluded that the current health expenditures as a percentage of GDP, the number of hospital beds per 1,000 people, and the Human Capital Index (HCI) have had a significant

negative impact on GDP losses. This finding suggests that increasing investment in healthcare and enhancing the quality of healthcare infrastructure can contribute to the reduction of economic losses over time. The study also demonstrates that the number of hospital beds per 1,000 people has a significant impact.

The mortality rate (per 1,000 people), the number and rate of deaths from unintentional poisoning (per 100,000 population), and other indicators reflecting the percentage of deaths, as discussed earlier, have negative coefficients, indicating a significant decrease in economic losses with their increase. Specifically, the augmentation of hospital bed capacity, concomitant with a decline in fatalities resulting from unintentional poisoning, contributed to a reduction in GDP losses. In a similar vein, the human capital index (HCI) and life expectancy at birth exhibited negative coefficients; however, these coefficients were not statistically significant.

However, certain indicators, including mortality from air pollution rates and adult female and male mortality rates, have demonstrated a positive correlation with GDP losses, suggesting an increase in economic losses. This underscores the necessity for an integrated approach to enhance public health and regulate pollution. It is imperative to acknowledge that infant and newborn mortality also exerted a favorable influence on GDP losses, underscoring the necessity for additional measures to enhance obstetric and child health care conditions. The results of the study indicate that investing in health and environmental safety is a crucial strategy for mitigating the economic impact of pandemics and other crises.

Conclusion

The study found that the economic impact of the COVID-19 pandemic was uneven across countries due to multiple factors. A salient finding of the study is that macroeconomic policy measures, including alterations in interest rates and the magnitude of monetary stimulus, proved ineffective in significantly mitigating the economic consequences of the crisis experienced in 2020. This phenomenon can be attributed to the reduced efficacy of conventional monetary instruments in addressing supply constraints stemming from the pandemic. Concurrently, fiscal measures, encompassing direct transfers, subsidies, and tax reductions, contributed meaningfully to the economic recovery in 2021 and the mitigation of aggregate economic losses.

The effectiveness of public administration, the level of corruption control, and the quality of the regulatory framework are among the institutional factors that have played an important role. It has been demonstrated that countries with high levels of institutional sophistication, such as New Zealand and Finland, have exhibited faster recovery rates. This finding serves to corroborate the notion that robust institutions are of paramount importance during periods of crisis.

An analysis of economic structure factors revealed that countries with a high share of the services sector, particularly tourism and retail, experienced substantial economic losses in 2020. However, as economies adapted and opened up in 2021, the impact of this factor diminished. At the same time, economic diversification, as evidenced by South Korea, has been shown to contribute to greater resilience and adaptability.

The capacity of health systems, which is determined by the number of hospital beds, the number of medical personnel, and the level of healthcare funding, is also critical. Countries that have robust health systems, such as Germany and Japan, have demonstrated a more effective ability to control the spread of the virus and reduce mortality, thereby mitigating the economic impact of the pandemic.

Consequently, the analysis was expanded to encompass factors of economic structure and health system capacity, thereby facilitating a more comprehensive evaluation of the underlying causes of the observed variations in economic losses among countries during the period of the pandemic. This study not only deepened our understanding of the impact of the pandemic, but also provided recommendations for making economies more resilient to future crises. It is important to continue to explore and address the diversity of factors in order to develop more effective strategies to mitigate the impact of crises and accelerate economic recovery in the face of their global nature.

Bibliography

Alon, T., Kim, M., Lagakos, D., Van Vuren, M., 2022. Macroeconomic effects of COVID-19 across the world income distribution. *IMF Economic Review*, No 71(1). P. 99–147. DOI: 10.1057/s41308-022-00182-8.

Dyvik, E.H., 2024. Impact of the coronavirus pandemic on the global economy — Statistics & Facts. Statista. Jul. 3. Available at: https://www.statista.com/topics/6139/covid-19-impact-on-the-global-economy/#topicOverview

Ghecham, M. A., 2022. The Impact of COVID-19 on Economic Growth of Countries: What Role Has Income Inequality in It? *Economies*, No 10 (7). P. 158. DOI: 10.3390/economies10070158

Jawad, M., Naz, M., 2023. Impact of Covid-19 pandemic on macroeconomic aspects. *Journal of Open Innovation: Technology, Market, and Complexity*, Vol. 9, Issue 3. 100126. DOI: 10.1016/j.joitmc.2023.100126

Kizilov, V.V., 2021. Some Macroeconomic Consequences of COVID-19: Specifics of the 2020 World Economic Crisis. *Financial Journal,* Vol. 13, No 1. P. 9–27. DOI: 10.31107/ 2075-1990-2021-1-9-27 (in Russian).

Laikam, K.E., Bikbaeva, A.R., Pavlova, E.K., 2021. Impact of the Coronavirus Pandemic on Labor Market. *Federalism*, Vol. 26, No 4. P. 5-19. Available at: https://doi.org/10.21686/2073-1051-2021-4-5-19 (in Russian).

McKibbin, W., Fernando, R., 2020. The Global Macroeconomic Impacts of COVID-19: Seven Scenarios. *CAMA Working Paper No. 19/2020*. Available at: https://ssrn.com/abstract=3547729 or http://dx.doi.org/10.2139/ssrn.3547729

NBER (National Bureau of Economic Research), 2020. Macroeconomic Outcomes and COVID-19: A Progress Report. *NBER Working Paper Series. Working Paper No 28004*. 2020. Available at: https://www.nber.org/system/files/working_papers/w28004/w28004.pdf

OECD, 2021. *Beyond COVID-19 Prospects for Economic Recovery in Central Asia*. Paris: OECD Publishing. Available at: https://doi.org/10.1787/03882e7b-en.

Petrosyan, G.A., Petrosyan, I.B., Petrosyan, H.G., 2023. Unevenness in the Economic Impact of the COVID-19 Pandemic: The Depth of the Economic Decline in Different Countries and the Factors that Caused It. *Studies on Russian Economic Development*, Vol. 34, No 4. P. 554–564. DOI: 10.1134/S1075700723040135

Rodygina, N. Y., Musikhin, V. I., 2024. COVID-19 Impact on Developing and Poorer Economies. *Russian Foreign Economic Journal*, No 9. P. 27–41. https://doi.org/10.24412.2072-8042-2020-10089 (in Russian).

Selishcheva, T.A., 2021. Impact of The Covid-19 Pandemic on the Economy of the Eurasian Economic Union Member Countries and the Prospects of Its Restoration. *Journal Izvestiâ Sankt-Peterburgskogo gosudarstvennogo èkonomičeskogo universiteta*, No 3. P. 36–42 (in Russian).

Shuyskiy V., 2021. Coronavirus Pandemic and International Trade in Services. *Russian Foreign Economic Journal*, No 4. P. 7–12. Available at: https://ssrn.com/abstract=3909443 (in Russian).

Su, Z., 2021. Rigorous Policy-Making Amid COVID-19 and Beyond: Literature Review and Critical Insights. *Int J Environ Res Public Health*, Nov 26, 18(23):12447. DOI: 10.3390/ijerph182312447

UNDP, 2021. *Analysing long-term socio-economic impacts of COVID-19 across diverse African contexts*. UNDP Regional Bureau for Africa. Available at: https://www.undp.org/sites/g/files/zskgke326/files/migration/africa/f5a32ba0e2fb380796e3596e0857ab63f2acb1300c5bb17aad9847e13f941c43.pdf

UNECE, 2021. The Impact of COVID-19 on trade and structural transformation in Armenia. Evidence from UNECE's survey of Micro, Small and Medium Enterprises (United Nations publication issued by the Economic Commission for Europe). Available at: https://unece.org/sites/default/files/2021-01/Impact_COVID-19_Armenia.pdf

World Bank, 2022. World Development Report 2022, Finance for an Equitable Recovery. Chapter 1. The Economic Impacts of The COVID-19 Crisis. Available at: https://www.worldbank.org/en/publication/wdr2022/brief/chapter-1-introduction-the-economic-impacts-of-the-covid-19-crisis

Appendix

Table 1 presents the results of a regression analysis that estimates the impact of various macroeconomic indicators and fiscal measures on economic losses in 2020 caused by a COVID-19 pandemic. In particular, the table presents the coefficients of the regression models that demonstrate how changes in each of the factors such as inflation, GDP per capita, credit-to-GDP ratio, and other indicators affect the magnitude of economic losses. Substantial attention is paid to the role of fiscal policy, the effectiveness of which was measured by analyzing its various components. For the accuracy of the estimation, the coefficient of the service sector was included in the model to take into account the influence of the structure of the economy on the results of the analysis and to exclude it from the estimation of other factors.

Table 1. Impact of selected indicators on the size of real GDP losses in 2020 with value added of the services sector (% of GDP) as a control variable

Indicator	Service sector share ratio	Coefficient of the relevant indicator
Fiscal measures (above the line)	0.1509***	-0.1196
Fiscal measures (below the line)	0.0727*	-0.0048
Fiscal measures, total	0.1591***	-0.088
Monetary policy response in 2020	0.1131***	-0.1475
Cumulative MP response in 2020–2021	0.141***	-0.0437
Credit to GDP ratio 2020	0.1296*	-0.0205***
Credit to GDP ratio 2021	0.1357**	-0.0221***
Gross domestic product per capita in current prices, 2019	0.2359***	-0.0001***
Inflation, average consumer prices, 2019	0.1046***	-0.222*
Inflation, consumer prices at the end of the period, 2019	0.1042***	-0,206*
Total investment, 2019	0.1309***	-0.0874**
Total investment, 2020	0.1309***	-0.116***
Gross national savings, 2019	0.1403***	-0.1498***
Gross national savings, 2020	0.1337***	-0.1922***
Unemployment rate, 2019	0.1443***	-0.0338
Unemployment rate, 2020	0.1331***	0.0496
Public administration sector revenues, 2019	0.1524***	-0.0287
Public administration sector revenues, 2020	0.1568***	-0.0364
Total government expenditures, 2019	0.1414***	-0.0011
Total public expenditure, 2020	0.1242***	0.03
Gross debt of the public administration sector, 2019	0.1317***	0.0139
Gross debt of the public administration sector, 2020	0.1211***	0.0249**
Current account balance, 2019	0.1702***	-0.2577***
Current account balance, 2020	0.151***	-0.2374***
Controlling corruption: an assessment, 2019	0.2266***	-1.8298***
Government effectiveness: an assessment, 2019	0.2255***	-1.7668***
Controlling corruption: percentile rankings, 2019	0.1762***	-0.0257
Government effectiveness: percentile rankings, 2019	0.1679***	-0.0186
Political stability and absence of violence/terrorism: an assessment, 2019	0.1724***	-0.8985
Political stability and absence of violence/terrorism: percentile rankings, 2019	0.1498***	-0.0079
Normative quality: an assessment, 2019	0.2307***	-1.8437***
The rule of law: an assessment, 2019	0.238***	-2.0189***
Voice and accountability: an evaluation, 2019	0.1743***	-0.6632
Quarantine days	0,0448	-0.0075
COVID-19 cases, 2019	0.1391***	0.0000
COVID-19 cases, 2020	0.1388***	0.0000

Source: authors' estimates.

*** means that the p-value is less than 0.01, ** means that the p-value is less than 0.05, and * means that the p-value is less than 0.1. No * means that the coefficient is not statistically significant.

Table 2 presents the results of the analysis of cumulative GDP losses for 2020–2021, with the value added of the services sector as the control variable. This analysis covers a longer time period and reflects the cumulative impact of the pandemic on economies. The table demonstrates that fiscal and monetary measures taken in response to the crisis had a significant impact in reducing cumulative economic losses. The coefficients of the regression models show how much the accumulated losses would change as a function of changes in each of the factors such as inflation, investment, unemployment rate and national savings. The table also emphasizes the long-run effects of fiscal measures, which are evident in 2021.

Table 2. Impact of selected indicators on the size of total GDP losses in 2020–2021 with service sector value added (% of GDP) as a control variable

Indicator	Service sector share ratio	Coefficient of the relevant indicator
Fiscal measures (above the line)	0.0047	-0.2119*
Fiscal measures (below the line)	-0.0998*	-0.0535
Fiscal measures, total	0.0141	-0.1433**
Fiscal measures/losses	-0.02	-0.6572**
Fiscal measures / cumulative losses	-0.0424	-0.1938**
Monetary policy response in 2020	-0.1122**	-0.1378
Monetary policy response in 2021	-0.113**	0.0919
Cumulative MP response in 2020-2021	-0.0438	-0.0769
Credit to GDP ratio 2020	0.0164	-0.0142
Credit to GDP ratio 2021	0.0123	-0.0139
Gross domestic product per capita in current prices, 2019	0.0765	-0.0001***
Gross domestic product per capita in current prices, 2020	0.0801	-0.0001***
Gross domestic product per capita in current prices, 2021	0.0881	-0.0001***
Inflation, average consumer prices, 2019	-0.0621	-0.1375
Inflation, average consumer prices, 2020	-0.0621	-0.0627
Inflation, average consumer prices, 2021	-0.0375	0.0823
Inflation, consumer prices at the end of the period, 2019	-0.0692	-0.2083
Inflation, consumer prices at the end of the period, 2020	-0.0482	0.0186
Inflation, consumer prices at the end of the period, 2021	-0.0428	0.0498
Total investment, 2019	-0.0495	-0.0567
Total investment, 2020	-0.049	-0.0746
Total investment, 2021	-0.0462	-0.0385
Gross national savings, 2019	-0.0387	-0.1344***
Gross national savings, 2020	-0.0445	-0.1831***
Gross national savings, 2021	-0.0447	-0.1328***
Unemployment rate, 2019	-0.022	-0.2107**
Unemployment rate, 2020	-0.0272	-0.1009
Unemployment rate, 2021	-0.0188	-0.181**

Indicator	Service sector share ratio	Coefficient of the relevant indicator
Public administration sector revenues, 2019	-0.0213	-0.055
Public administration sector revenues, 2020	-0.0236	-0.0447
Public administration sector revenues, 2021	-0.0221	-0.0481
Total government expenditures, 2019	-0.0336	-0.0265
Total public expenditure, 2020	-0.0486	0.007
Total expenditures of the public administration sector, 2021	-0.0631	0.0333
Gross debt of the public administration sector, 2019	-0.0457	0.0023
Gross debt of the public administration sector, 2020	-0.0546	0.0138
Gross debt of the public administration sector, 2021	-0.0599	0.0199
Current account balance, 2019	-0.002	-0.2834***
Current account balance, 2020	-0.0277	-0.2878***
Current account balance, 2021	-0.0355	-0.2618***
Controlling corruption: an assessment, 2019	0.0323	-1.5473**
Controlling corruption: an assessment, 2020	0.0303	-1.5199**
Controlling corruption: an assessment, 2021	0.0366	-1.6765**
Government effectiveness: an assessment, 2019	0.0478	-1.8333**
Government effectiveness: an assessment, 2020	0.0385	-1.7055**
Government effectiveness: an assessment, 2021	0.0364	-1.735**
Political stability and absence of violence/terrorism: an assessment, 2019	-0.0248	-0.5152
Political stability and absence of violence/terrorism: assessment, 2020	-0.0277	-0.4132
Political stability and absence of violence/terrorism: assessment, 2021	-0.0233	-0.5165
Normative quality: an assessment, 2019	0.0658	-2.1673***
Regulatory quality: assessment, 2020	0.0598	-2.0674***
Regulatory quality: an assessment, 2021	0.0633	-2.1482***
The rule of law: an assessment, 2019	0.0357	-1.5857**
The rule of law: an assessment, 2020	0.0415	-1.7577**
The rule of law: an assessment, 2021	0.0438	-1.8023**
Voice and accountability: an assessment, 2019	-0.0116	-0.6285
Voice and accountability: an assessment, 2020	-0.01	-0.6457
Voice and accountability: an assessment, 2021	0.0042	-0.9069
Foreign trade, 2019	-0.0776	-0.0016
Foreign trade, 2020	-0.0638	-0.0072
Foreign trade, 2021	-0.0638	-0.0072
Quarantine days	-0.0508	-0.0141
COVID-19 cases, 2020	-0.0452	0
COVID-19 cases, 2021	-0.0461	0
COVID-19 cases, total	-0.0458	0

Source: authors' estimates.

*** means that the p-value is less than 0.01, ** means that the p-value is less than 0.05, and * means that the p-value is less than 0.1. No * means that the coefficient is not statistically significant.

Table 3 examines the impact of health system indicators on economic losses in 2020 and cumulative losses over 2020–2021. The table presents coefficients showing how indicators such as current health expenditure, number of hospital beds, life expectancy and mortality rates affect the magnitude of GDP losses. The results point to the important role of well-developed health systems in mitigating the negative economic impact of a pandemic. For example, increased health expenditure and improved health infrastructure contributed to the reduction of economic losses.

Table 3. Impact of health sector performance (2017–2019 average) on GDP losses in 2020 and cumulative losses in 2020–2021

	Coefficient	
Indicator	**GDP losses in 2020**	**GDP losses in 2020–2021**
Cause of death from non-communicable diseases (% of total)	0.0297	-0.0474*
Current expenditure on health care (% of GDP)	0.0943	-0.4505**
Mortality rate (per 1000 people)	-0.2481*	-0.2406
Hospital beds (per 1000 people)	-0.3317*	-0.5789**
Human Capital Index (HCI)	-2.348	-13.8496***
Life expectancy at birth, total (years)	0.0796	-0.1671***
Lifetime risk of maternal mortality (%)	-0.5955*	0.4531
Mortality rates associated with residential and ambient air pollution, age-standardized, female (per 100,000 male population)	-0.0143**	0.0204**
Age-standardized mortality rate from household and atmospheric air pollution, males (per 100,000 male population)	-0.0092*	0.0177***
Unintentional poisoning mortality rate (per 100,000 population)	-1.053***	-0.1105
Mortality rates associated with unsafe water, unsafe sanitation and lack of hygiene (per 100,000 population)	-0.0414**	0.0278
Adult mortality (per 1,000 adult women)	-0.0078	0.0117**
Infant mortality (per 1,000 live births)	-0.0436**	0.0498*
Newborn mortality (per 1,000 live births)	-0.0627	0.1098**
Mortality rate of children under 5 years of age (per 1,000 people)	-0.0312**	0.0286
Female mortality rate of children under 5 years of age (per 1,000 persons)	-0.0331**	0.0303
Mortality rate of children under 5 years of age, males (per 1,000 persons)	-0.0295**	0.0272*
Rural population (% of total population)	0.0021	0.0694***

Source: authors' estimates.

*** means that the p-value is less than 0.01, ** means that the p-value is less than 0.05, and * means that the p-value is less than 0.1. No * means that the coefficient is not statistically significant..

Ethiopia in an Era of Expanded BRICS: A Brief Look at Ethiopia's Entry and Experience within the Organization

Dareskedar Taye, Henok Getachew

Dareskedar Taye — lead researcher in the Institute of Foreign Affairs, Addis Ababa, Ethiopia.

ORCID: 0009-0000-9383-8723

Henock Getachew — senior researcher in the Institute of Foreign Affairs, Addis Ababa, Ethiopia.

ORCID: 0009-0008-5911-8632

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Keywords: BRICS expansion, Global South, multiple engagement, Ethiopia.

Abstract

It has been one year since Ethiopia was given the opportunity to join BRICS. The 2023 Heads of State Summit in South Africa expanded to incorporate new member countries from Africa, the Middle East, and Latin America. This article seeks to examine Ethiopia's interests in terms of joining the club and its experience following integration. After collecting the relevant data through document analysis and interviews, the authors found out that, firstly, Ethiopia joined BRICS after making a foreign policy calculation with regards to its diplomatic goal of the diversification of friendly nations and groupings, as well as amassing investment and trade opportunities. Secondly, within the country, people are divided between those who favor joining the alliance and those who oppose it, though this has never hindered the government from operating within BRICS. Thirdly, within a year, Ethiopia has gained experience of BRICS' internal operation system.

1. Introduction

Ethiopian diplomacy is experiencing a tremendous transformation following the political reform in 2018 which brought forth new political leadership and a new political orientation that emphasized expanding pragmatic engagement with various different countries. The political party in power since 1991, the Ethiopian Peoples' Revolutionary Democratic Front (EPRDF), had been pressed by the public and members of the party itself to embrace political reform. As a result, a new political leader, Prime Minister Abiy Ahmed, was elected to lead the party and the nation. He swiftly introduced reforms in the party structure, security apparatus and the mechanism of economic governance. The new political regime that came into power brought about significant change both in terms of domestic and foreign policy. Since then, Ethiopia has embraced economic reforms in a way that has strengthened the role of the private sector in the economy. The incumbent prime minister is also giving adequate attention to the completion of flagship national infrastructure projects. Among the hydropower generation projects, construction of the Grand Ethiopian Renaissance Dam (GERD) on the river Nile began at a much faster rate. The Dam, however, has remained a point of controversy in diplomatic relations between Ethiopia and Egypt. It has also cast its shadow on Ethiopia's ties with the countries of the West [Taye 2024].

The unprecedented change for post-2018 Ethiopian diplomacy consisted of, among other things, the rapprochement between Ethiopia and Eritrea. The two countries have shared history, culture (religion and language), and extensive boundaries but have been hostile to one another, especially since the 1998–2000 inter-state war. Though the war was concluded by the Algiers peace agreement of 2000, there was no positive development in diplomatic and economic relations since then. It is only after political reform in 2018 that both states managed to establish diplomatic rapprochement [Belachew 2018]. In 2019, Ethiopian Prime Minister Abiy Ahmed was awarded the Nobel Peace Prize for his effort to bring peace between the two nations. A thaw in the relations between the two nations resulted in a critical shift not only in the foreign policy of Ethiopia alone, but it also helped to restructure the nature of relationship amongst the countries of the Horn of Africa.

The encouraging developments in the Horn of Africa were reversed when Ethiopia entered into a civil war, known as the Tigray War, between 2020 and 2022. It was an era in which Ethiopia was largely pressured and sanctioned by countries of the West. In particular, Ethiopia was repeatedly criticized for inviting Eritrean forces to participate in the war; for sabotaging humanitarian assistance efforts; and for gross violation of human rights. Most of those criticisms, diplomatic pressures and exclusions lasted for two years up until a Cessation of Hostilities Agreement was signed between the government of Ethiopia and the Tigray fighters in November 2022.

Accession to BRICS is another important recent development in Ethiopia's diplomatic efforts. Ethiopia applied to join the club in 2023 and the Heads of State Summit in South Africa accepted Ethiopia's request. This article is therefore designed to explain the reasons that pushed Ethiopia to join, to examine public attitudes as observed immediately after its membership was accepted, and to briefly assess the experience of Ethiopia within BRICS

in 2024. The relevant data for the article has been collected through interviews with individuals who are experts on Ethiopia's multilateral engagement. Documents such as scenario papers from the Institute of Foreign Affairs and other published materials such as journals, newspapers and government media outlets were also important sources of data.

2. Understanding BRICS

The international governance system and institutions that were constructed after World War II are increasingly seen as not matching the daunting economic, security, and environmental challenges the world is currently facing. Furthermore, these institutional arrangements are accused of lacking legitimacy, effectiveness, and accountability, thereby "generating calls for change" [Hampson & Heinbecker 2011. P. 299]. Moreover, it establishes alternative multilateral arrangements that represent the Global South. Accordingly, since the turn of the early 21st century, political and economic arrangements have evolved parallel to the existing ones. In forging a strategic partnership, the club of Brazil, China, India, Russia, and South Africa can be regarded as one of these patterns. It was in 2001 that Jim O'Neill, a British economist and banker, crafted the term BRIC by predicting the increasing economic dominance of the emerging economies of Brazil, Russia, India, and China [Mansfield 2014]. These countries' subsequent meetings at ministerial levels culminated in the inauguration of BRIC in Yekaterinburg, Russia, in June 2009. South Africa's inclusion in the club in April 2011 allowed BRIC to transform into BRICS. Its membership has broadened the hitherto economic cooperation by embracing the developmental need of Johannesburg [Anuoluwapo, Abdul-Wasi and Edwin 2018]. Although all members of the club do not "agree on how the architecture of the global governance should be reshaped" [Daniel & Virk 2014. P. 4], there is a common understanding that the existing institutions of global governance, such as the International Monetary Fund (IMF), the World Bank (WB) and the World Trade Organization (WTO) need to be reformed and democratized [Daniel & Virk 2014]. Thus far, the existing international financial architecture "is not designed to deliver the kind of financial support that developing countries need to realize their growth and development ambitions" [United Nations Conference on Trade and Development 2023. P. 102], and the stringent conditionality imposed on many states of the Global South to make structural reform. However, these states need to grapple with account deficits. Cognizant of this reality, during the UN General Debate, the Prime Minister of Barbados, Mia Mottley, underscored that existing financial frameworks, including institutions, policies, rules, and practices "no longer serve the purpose in the 21st century, served in the 20th century" [United Nations 2022].

Although the arrangement does not have a founding treaty and a secretariat, it has resulted in the establishment of the BRICS New Development Bank (NDB). During its sixth meeting in July 2014, the Bank was founded with the purpose of "mobilizing resources for infrastructure and sustainable development projects in BRICS and other emerging and developing economies" [IBEC 2021]. This helped deepen economic integration and deal with financial and economic governance. Thus far, the NDB is credited for providing "emergency relief funding to China, India, and South Africa" [Muresan 2020. P. 9]. As an effort to further deepen intra-BRICS interactions, multiple initiatives have been

adopted. These initiatives include the BRICS Business Council, the BRICS Think Tanks Council (BTTC), and the BRICS Vaccine Research and Development Center. The BRICS Business Council envisages promoting interaction among the business communities of the member states. The BTTC aims to increase collaboration among the think tanks of the member states. The BRICS Vaccine R&D Center is working to enhance their laboratory capacity. Among the various initiatives, people-to-people exchange among member states enhances the ties that start from the bottom up. With varying degrees of effectiveness, the aforementioned initiatives have been observed to attain the long-term strategy of BRICS. Recently, the BRICS Business Council managed to support women's start-ups and digital financial inclusion projects and discussed the significance of the care economy and opportunities in healthcare and tourism.

Throughout its existence, BRICS has held 16 summits. Its decisions symbolize the collective desires of members of the arrangement to reform global governance and development, emphasizing multipolarity and non-intervention [Gok 2024]. For example, the 16th BRICS summit was held in Kazan, Russia, on 22–24 October 2024, with the theme of "Strengthening Multilateralism for Just Global Development and Security." Its outcome document reflects the member states' desire to reform the existing global arrangement [BRICS 2024]. Over time, BRICS has managed to expand its economic and financial cooperation to peace and security, technology, energy, infrastructure, digital economy, healthcare, and green development [Institute for Security and Development Policy 2024]. The arrangement also demonstrates its inclusiveness by incorporating different countries with different political systems, economic development, and population size. Currently, the member states are interested in establishing a fairer international system that represents the voices of the Global South. In its Kazan declaration, they demonstrated commitment "to improving global governance by promoting a more agile, effective, efficient, responsive, representative, legitimate, democratic and accountable international and multilateral system" [BRICS 2024. P. 2]. Nowadays, BRICS is concerned about more than just economic and development. Since its birth, the bloc has been aimed at boosting intra-trade and investment among member states as part of South-South cooperation [Prinsloo 2023]. It also deals with matters pertinent to peace and security, such as commitment to multilateralism and upholding international law, adhering to the UN Charter, reforming the United Nations, including the Security Council, and non-proliferation and disarmament.

Notwithstanding the BRICS countries' attempts at galvanizing collective efforts to reform existing global governance institutions and help create a fair multilateral order, economic disruptions due to the global pandemic, global inflation, and the conflict in Ukraine, as well as the concomitant rises in the costs of food, fuel, and agricultural inputs and the disruption of trade, have continued to pose challenges to the club's functioning [Muresan 2023].

3. The expansion of BRICS

The 15th BRICS summit was held in Johannesburg on 22–24 August 2023. It was convened under the title "BRICS and Africa: Partnership for Mutually Accelerated

Growth, Sustainable Development, and Inclusive Multilateralism." All members, except the Russian Federation, were represented by their heads of state. Different leaders from the Global South also attended the Johannesburg summit, including the African Union, the Arab League, the Maghreb Union, the Organization of Islamic Union, and the United Nations. The summit ended with the signing of the Johannesburg II declaration. The declaration addressed the "partnership for inclusive multilateralism, fostering an environment of peace and development, partnership for mutually accelerated growth and sustainable development, deepening people-to-people exchange and institutional development" [BRICS 2023]. Reports indicated that more than 40 states had demonstrated willingness to join BRICS during its 15th summit [Ashby et al. 2023]. However, only 22 states have formally requested membership [European Parliament 2024]. At the end of the summit, the five members of BRICS decided to increase the club to 11 by admitting six new states: from Africa (Ethiopia and Egypt), the Middle East and the Gulf (the Islamic Republic of Iran, the Kingdom of Saudi Arabia and the United Arab Emirates) and South America (Argentina). Argentina, however, under its new far-right president, Javier Milei, was never willing to join on the grounds that the country's "foreign policy differs in many aspects from that of the previous government" [European Parliament 2024. P. 4]. Prior to the decision of the 15th BRICS summit, member states did not have similar positions vis-à-vis the expansion of the membership. China had sought an interest in expanding the bloc's membership with the apparent objective of establishing "a counterpoint to G7" [Ashby et al. 2023], while India viewed the expansion from the vantage point of preserving "its privileged stature as a founding member, advance its claim to leadership as a voice of the Global South" [Ashby et al. 2023]. Another area of difference regarding expansion was the inclusion of Iran. India, Brazil, and South Africa were cautious regarding Iran's new candidature to the club due to its "anti-Western" stance. Despite the differences in the need and rationality to expand membership, the enlargement of BRICS was made possible for the second time after 13 years. Expansion helps the BRICS countries represent 42 and 36 percent of the world population and global GDP, respectively [Ashby et al. 2023].

Admitting new members into BRICS after January 2024 has had geopolitical and economic implications. Hence, the expansion of the BRICS could be viewed from different angles. Some view the extended BRICS groups as "an anti-Western and anti-colonial alliance" [Jetschgo-Morcillo & Kanter 2024]. Many European countries share this view. Sub-Saharan countries, for example, view the enlargement of BRICS as an alternative to existing economic cooperation and economic development structures constrained by interference and established normative standards. This understanding is embedded among most African nations due to the prevalence of conditionality in securing financial loans.

All members' decisions to admit six new states into the group share a similar rationality, something that has to do with reform of the international order. Nevertheless, it is important to look at this on a case-by-case basis. For instance, Brazil considered membership enlargement would have the advantage of "achieving a more multilateral and representative global order" [Solanki & Nouwens 2023]. As part of this strategy, Brazil sought to invite Argentina. Reforming the international order aside, Russia considered expanding BRICS as one of the goals of promoting economic relationships among the

BRICS members as well as "to further push for a multipolar world order" [Ashby et al. 2024]. The conflict between Ukraine and Russia has also influenced the latter to look for the expansion of the membership in order to overcome mounting Western diplomatic pressure. In India, the expansion of BRICS could benefit New Delhi by diversifying and strengthening existing partnerships with newly incorporated member states. Similarly to the founding members of BRICS, China is calling for reform of the international order. In doing so, Beijing is advocating for reform of the United Nations Security Council and the Bretton Woods institutions. Broadening the membership base of the BRICS, in the eyes of Beijing's government, is a means to democratize the existing international order that seemed to lack the Global South's representation and interests. South Africa also shared the perspective of the Chinese government on the reform of global institutions by broadening the BRICS membership. Nevertheless, the country wants to "change some aspects of the liberal order that is in favor of the developed world while defending a rule-based global order" [Coning 2024].

The new members differ in terms of economic development and political systems. The UAE and the KSA's admission to the bloc would help reduce the financial constraints of the NDB [Abdelaziz 2023]. On the contrary, Ethiopia and Egypt were interested in joining the club partly because of the economic prospects. While the enlargement of the existing arrangement augments the club's capacity, the political differences between Addis Ababa and Cairo on the use of their transboundary water resource and the geopolitical rivalry between Tehran and Riyadh may affect the cohesion of the grouping. The admission of new members may cause further stress on the BRICS countries' efforts to harmonize the existing divergent political, economic, and security objectives.

It is believed that BRICS will continue to serve as an important platform for the Global South. Expansion of the membership would help cultivate a more balanced world order by voicing the concerns and needs of the hitherto marginalized voices of the Global South in different international institutions. An expanded BRICS would contribute much to the discussion on reforming the existing institutions by enhancing cooperation among the member states in the United Nations General Assembly and helping them secure funding sources without strict conditionality [Jetschgo-Morcillo & Kanter 2024]. Furthermore, the group would offer participant states an opportunity to escape from the trend of marginalization from shaping the global order, where no single country or group of countries dominates the system in their favor, and overcoming the domino effect of the downturn of the liberal norm.

4. Factors behind Ethiopia's decision to join BRICS

The 2023 Heads of State Summit in Johannesburg provided an opportunity for Ethiopia to join BRICS. Weeks before the public announcement concerning its expansion, there was speculation on the possibility of Ethiopia's admission.[1] A debate on this issue began within the country. One of the key issues had to do with the fact that BRICS has no

[1] The Institute of Foreign Affairs had developed a scenario paper concerning the possible acceptance of Ethiopia into BRICS during May–June 2023. The paper had been presented to researchers and was open for debate and discussion. It examined the diversity of opinions related to BRICS.

clearly stated standards or rules to embrace new members. There was also a nationwide assumption that Ethiopia could not be a potential candidate for BRICS, as it was experiencing a civil war that lasted for two years and experiencing intense diplomatic pressure from the West. That seems to be the reason why Prime Minister Abiy Ahmed, while sending a congratulatory message to the public about Ethiopia's acceptance, said that the potential of Ethiopia is better recognized abroad than domestically. He said, "Although Ethiopians might not recognize it, the world has acknowledged the growth" [Fortune 2024].

There is no doubt that the move toward BRICS involved a foreign policy calculation from the Ethiopian side. Yet it is difficult to scrutinize the precise types of interests that existed within the equation. There are still a number of identified causes that led Ethiopia toward BRICS. Economic interest seems to have come ahead of other factors. Ethiopia, with its rapidly growing economy but also a significant development finance gap and debt burden with a "public and publicly guaranteed (PPG) debt stood at 40 percent of GDP at end-June 2023" [IMF 2024. P. 3], wants to benefit from any global arrangement to further develop its economy. Endale (2023) tried to associate this economic cause with a lengthy deal on the restructuring of debt management that Ethiopia was making with international creditors, since it owes billions of dollars. Ethiopia is one of the most highly indebted countries in the world and, to make the situation worse, some of these debts are soon set to mature. The quest for debt restructuring was therefore critical in the deal with international creditors. Ethiopia made a lengthy deal with the Paris Club though without any significant progress in favor of Ethiopia either to extend debt repayment periods or total suspension until it joined BRICS. An official request was also submitted to the Club at its 2023 summit [Endale 2023]. In the same way, Ethiopia requested additional development finance from the IMF and WB since it experienced political reform in 2018. Nevertheless, neither significant financing opportunities nor debt restructuring were on offer up until Ethiopia decided to join BRICS. The lengthy negotiations have led to a further deterioration in the country's domestic economic situation. Ethiopia, like any other rational actor, was looking for alternative financial and investment opportunities available within BRICS.

The anticipated economic benefit through BRICS is one of Ethiopia's biggest hopes. The New Development Bank (NDB) is an evolving financial institution established by the BRICS alliance. If Ethiopia's access to BRICS is supplemented by membership to the NDB, this should provide an additional development finance opportunity. Accession to this bank would not only help Ethiopia to alleviate its financial constraints, but also provide it with a voice in the decision-making process. This is an important step: to be a decision maker, and not simply a decision "taker." Apart from the chance of direct access to a financial institution like the NDB, membership of BRICS would also help to deepen economic relations with each of the members. Some BRICS members have big economies; others are technological leaders, which give them comparative advantages in different areas. Consequently, Ethiopia seeks to work with BRICS members to share resources and experiences. The government of Ethiopia believes that it has been selected to join BRICS, from a number of nations that expressed their interest, for its potential to be one of the major economies of Africa in the foreseeable future.

Abiy Ahmed posted on X that "Ethiopia stands ready to cooperate with all for an inclusive and prosperous global order" (24 August 2023). This is a public call for working with likeminded nations toward a fair global order. Such statements show the importance of political considerations in the decision to join BRICS.

This may be a result of the diplomatic pressure it experienced in 2020–2022. In those years, Ethiopia was repeatedly mentioned in the UNSC for reasons associated with its construction of the Grand Ethiopian Renaissance Dam on the Nile River and the Tigray War [Taye 2024]. When the reservoir began to be filled, this caused upset in Egypt, which frequently took the case to the UNSC in order to pressure Ethiopia. The two-year-long Tigray War was also in the dossiers compiled by the countries of the West in order to challenge Ethiopia before the Council. These were the years that Ethiopia was looking for a reliable partner in its diplomatic row against its plaintiffs. Had it not been for the support of China and Russia, permanent members of the Council, and India, a non-permanent member during the time, Ethiopia could have faced numerous sanctions.

The data collected through interviews for the purpose of this research indicates that unless Ethiopia opens itself for multiple engagements with both established and emerging multilateral arrangements, its survival is in danger. During the Tigray War, there were continuous attempts to impose sanctions upon Ethiopia through the United Nations Security Council, but this failed due to vetoing by China and Russia. Without military cooperation with non-Western countries, the incumbent could have lost power. In addition to participation within the supranational institutions found in the Horn of Africa and in the continent, it is also imperative for Ethiopia to engage with institutions operating on the global level.

5. Public opinion on Ethiopia's accession to BRICS

Voices of support and opposition were heard immediately following the news of accession to BRICS. Government media and government-affiliated think tanks showed their support for the decision, in contrast to the critical voices heard through the private media and think tanks [Goshu, Teshome and Teshale 2024]. Support was given with the assumption that BRICS would bring economic and diplomatic advantage. The accession was considered as a sign of progress from diplomatic pressure and exclusion in the years 2020–2022 to an era of new diplomatic frontiers. It was portrayed as a new diplomatic success, with BRICS providing multiple opportunities to stand together with the countries of the Global South.

However, there are also some groups who criticized Ethiopia for relegating its tradition of a neutral foreign policy as far as great power politics is concerned and involving itself in geopolitical games by taking an anti-Western stand. This is based on the assumption that BRICS stands for replacing the dominant position of the West in the global governance structure. Authors like Acemoglu (2023) consider BRICS as the foreign policy tool of China, since it is, economically, the mightiest member of the club. His article was also republished in local newspaper in Ethiopia, Addis Fortune (2023). Ethiopia's accession to BRICS was therefore viewed as showing support to China. It is also further viewed as a move to challenge the established global governance structure together with

like-minded BRICS countries. But it is far from reality to consider BRICS as an alternative to the established global governance system.

Some even went further and recommended that Ethiopia embrace a de-BRICS approach. An anonymous source within a non-governmental organization in Ethiopia believes that the cost of joining BRICS far outweigh its benefits, and that Ethiopia should therefore think carefully before joining the group. This type of discussion was common, especially in the months between August and December 2023 though it disappeared after Ethiopia officially declared its membership in January 2024. Some also question the relevance of joining BRICS instead of working to further cement its bilateral relations with each of the member countries. Of course, Ethiopia enjoys strong bilateral relations with all the member countries and entering into the BRICS should not prevent it from further enhancing the already established bilateral engagements.

6. Ethiopia's experience within BRICS

One year into its BRICS membership, Ethiopia has had the time to draw conclusions of its own about the way decisions are made at all levels of the BRICS group. Be it in expert meetings on technical details or in political discussions by state representatives, decisions are made via consensus. The apparent difference in economic and military prowess amongst members does not prevent them from sitting together in order to reach agreement.

The other notable thing that Ethiopia experienced in its one-year journey within BRICS is the tendency to have meeting and coordination opportunities among different government agencies of the member countries. The 2023 Johannesburg Heads of State Summit Declaration [BRICS 2023] elaborates the tradition of interagency coordination. For instance, the Counter-Terrorism Working Group is composed of security and intelligence agencies member nations. As the vast majority of the visions and actions of BRICS intend to promote economic cooperation, governors of national banks and heads of relevant ministerial offices have numerous platforms to integrate commonly agreed goals and activities. Ministerial offices responsible for trade, industry, tourism, statistics, and science and technology are at the forefront of interagency coordination. There are also additional platforms to integrate member countries' government agencies working on energy and technical and vocational training. During the Russian presidency in 2024, the number of governmental agencies engaged in interagency coordination increased significantly. Ethiopia participated in more than half of the 200 plus meetings organized by Russia in 2024 [Gebre and Kebeta 2024].

Such interagency coordination may have a positive contribution in norm creation and institutionalization of BRICS over a longer period. It is imperative to raise the neo-functional assumptions of Ernst Haas (1998) at this point. This is a theory that provides assumptions about the way regional integration can be achieved. Even though much of the neo-functionalism theory is proposed as a scheme of integration for geographically neighboring countries, its assumptions on the relevance or the prerequisite of integration in specialized areas of cooperation as a means toward broader regional integration can also be a defining theory for interagency coordination within BRICS. For member

countries that neighbor one another and with wider options of trade and investment, such coordination might lead to broader regional integration.

A year as part of BRICS also shows that it provides additional opportunities to strengthen bilateral economic engagements amongst member states. A good example in this case is the currency swap agreements Ethiopia made with UAE and China. Ethiopia had strong economic ties with both even before joining BRICS, but its accession to the group provided an additional impetus to reach agreement. Similar types of agreements are also common between Russia and China and the UAE with India.

One of the expectations of Ethiopia, to join the New Development Bank (NDB), however, has not yet been achieved. Interviewees[2] recognized the fact that Ethiopia was expecting automatic admission to the Bank at the same time as joining BRICS. However, the road to the Bank is different, since it operates as an autonomous business. Lately, Ethiopia has realized that accession to the Bank requires not only fulfilling financial requirements but also striking a rigorous diplomatic deal with major stakeholders of the Bank.

7. Conclusion

It is too early to assess the role Ethiopia is playing within BRICS or the benefits it is accruing following accession. In this article, we have attempted to describe domestic public opinion during Ethiopia's move to join BRICS and its one year of membership. For Ethiopia, BRICS has become a supplementary platform for its multi-level and diverse diplomatic engagements with numerous states and international organizations. In its one-year journey within BRICS, Ethiopia has accepted the invitation to membership with a lot of publicity; joined the group and participated in numerous technical and political meetings; passed decisions in collaboration with other member states by way of consensus whereby the 16th BRICS Heads of State Summit and the Kazan Declaration is a good example in this case; and used the platform to further enhance bilateral relations with other member countries. It has also embarked on a bid to join the NDB.

Ethiopia's future actions within the group should be based on its experience over the past year. First, BRICS is still in the process of coordinating various government agencies which might include norm creation over an extended period. Establishing a convention will be the homework for the group in which Ethiopia may also have to engage in due course. Second, Ethiopia has to strategically use the BRICS platform in a way that supports its socioeconomic development. The trade, investment, and technological opportunities are immense, and Ethiopia has to ready itself to exploit the available opportunities.

Bibliography

Abdelaziz, M., 2023. *Egyptian Media Reflections on Egypt's Accession to BRICS*/ Fikra Forum. Available at: https://www.washingtoninstitute.org/policy-analysis/egyptian-media-reflections-egypts-accession-brics

[2] Interview with anonymous sources in the Ministry of Foreign Affairs, Addis Ababa, Ethiopia.

Acemoglu, D., 2023. *The Wrong BRICS Expansion*. Available at: https://addisfortune.news/the-wrong-brics-expansion/

Anuoluwapo, D., Abdul-Wasi, M. B., and Edwin, I., 2018. South Africa's Inclusion in BRICS: Challenges and Prospects for Development in Africa. *International Journal of African Renaissance Studies*, 13(2), pp.27-41. Available at: https://www.tandfonline.com/doi/abs/10.1080/18186874.2018.1519373

Ashby, H., et al., 2023. *What BRICS Expansion Means for the Bloc's Founding Members*. United States Institute of Peace. Available at: https://www.usip.org/publications/2023/08/what-brics-expansion-means-blocs-founding-members

Belachew, B. Y., 2018. The Recent Ethiopia-Eritrea Diplomatic Thaw: Challenges and Prospects. *Horn of Africa Bulletin*, July–August 2018, 30(3).

BRICS, 2023. XV BRICS Summit Johannesburg II Declaration. BRICS and Africa: Partnership for Mutually Accelerated Growth, Sustainable Development and Inclusive Multilateralism.

BRICS, 2024. XVI BRICS Summit. Kazan Declaration. Strengthening Multilateralism for Just Global Development and Security.

De Coning, C., 2024. South Africa's position in a changing global order. *ACCORD*. Available at: https://www.accord.org.za/analysis/south-africas-position-in-a-changing-global-order/

Daniel, R., and Virk, K., 2014. South Africa, Africa, and the BRICS (Brazil, Russia, India, China, and South Africa). *South Africa and the BRICS: progress, problems, and prospects*. Centre for Conflict Resolution. Available at: http://www.jstor.com/stable/resrep05168.6

Endale, A., 2023. Ethiopia into Geopolitical Trade. Available at: https://www.thereporterethiopia.com/36149/

European Parliament (EP), 2024. Expansion of BRICS: A quest for greater global influence? Briefing. Available at: https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2024)760368

Fortune, 2024. Ethiopia's Prime Minister Lauds BRICS Entry as "Major Diplomatic Victory". Available at: https://addisfortune.news/ethiopias-prime-minister-lauds-brics-entry-as-major-diplomatic-victory/

Gebre, Y., and Wakgari, K., 2024. Ethiopia's BRICS engagement under Brazil's presidency: maximizing economic benefits and widening partnerships. Available at: https://www.ifa.gov.et/2024/12/05/ethiopias-brics-engagement-under-brazils-presidency-maximizing-economic-benefits-and-widening-partnerships/

Gök, O. G., 2024. BRICS in the Changing World Order: Widening and Deepening Already? *SAM Snapshots*. Available at https://sam.gov.tr/snapshots/brics-in-the-changing-world-order-widening-and-deepening-already

Goshu, D., Teshome, A., and Teshale, D., 2024. *Does Ethiopia Benefit from Joining the BRICS? Global Trends and Local Perspectives*. Ethiopia Economic Associations (EEA), Policy Working Paper 23/2024. Available at: https://eea-et.org/wp-content/uploads/2024/01/Working-Paper-23-2024-BRICS.pdf

Haas, E. B., 1998. *The Uniting of Europe*. In Nelsen, B. F., and Stubb, A., (eds.), The European Union: Readings on the Theory and Practice of European Integration. 4th ed. Colorado: Lynne Rienner Publishers.

Hampson, F., and Heinbecker, P., 2011. The "New" Multilateralism of the Twenty-First Century. *Global Governance*, 17(3), pp. 299–310.

IBEC, 2021. *New Development Bank and International Bank for Co-operation establish framework for cooperation.* Available at: https://ibec.int/news/allnews/new-development-bank-and-international-bank-for-economic-co-operation-establish-framework-for-cooper/

IMF, 2024. *The Federal Democratic Republic of Ethiopia: Request for an Arrangement Under the Extended Credit Facility-Debt Sustainability Analysis.* Available at: https://www.elibrary.imf.org/view/journals/002/2024/253/article-A002-en.xml

Institute for Security Development Policy, 2024. *BRICS: Evolving into a vehicle for inclusive multilateralism?* Available at: https://www.isdp.eu/wp-content/uploads/2024/10/Backgrounder-BRICS-Oct-19.pdf

Jetschgo-Morcillo, M., and Kanter, C., 2024. *BRICS expansion: Geopolitical power shift or transactional alliance?* Available at: https://www.kas.de/en/brics-plus

Mansfield, E. D., 2014. Rising Powers in the Global Economy: Issues and Questions. *International Studies Review*, 16(3), pp. 437–466.

Muresan, A., 2020. Institute for Global Dialogue. *Understanding the role of the BRICS partnership: strategic ways forward. In South Africa in the World 2020: Pragmatism versus Ideology*. Available at: https://www.jstor.org/stable/resrep30587.9

Muresan, A., 2023. South African Institute of International Affairs. BRICS XV: Expectations for South Africa's 2023 chair. Available at: https://www.jstor.org/stable/resrep48505

Prinsloo, C., 2023. South African Institute of International Affairs. *Geopolitical Turmoil: BRICS Economic Windfall?* Available at: https://www.jstor.org/stable/resrep49161

Solanki, V., and Nouwens, M., 2023. *IISS experts assess the BRICS expansion*. Available at: https://www.iiss.org/en/online-analysis/online-analysis/2023/09/iiss-experts-assess-the-brics-expansion/

Taye, D., 2024. Institute for Development and International Relations. *The Horn of Africa in the Face of the Changing Conditions in Ethiopia and the Tigray War*. Available at: https://irmo.hr/novosti/the-horn-of-africa-in-the-face-of-the-changing-conditions-in-ethiopia-and-the-tigray-war/

United Nations, 2022. *Barbados Prime Minister Mottley Calls for Overhaul of Unfair, Outdated Global Finance System*. Available at: https://news.un.org/en/story/2022/09/1127611.

United Nations Conference on Trade and Development, 2023. *Trade and Development Report 2023: Growth, Debt, and Climate: Realigning the Global Financial Architecture.* Available at: https://www.un-ilibrary.org/content/books/9789213584866

BRICS in Transition: A Critical Analysis of Opportunities and Challenges within an Emerging Global Order

Raosaheb Bawaskar

Raosaheb Bawaskar — convener, Center for China Studies, Maharashtra National Law University, India and founder of the Water Policy Center, India.

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Abstract

This research critically examines the transition of BRICS into an expanded bloc incorporating Egypt, Ethiopia, Iran, and the UAE, amid a shifting global order. The study centres on the puzzle of how BRICS, with its growing diversity in economic priorities, political ideologies, and development levels, can maintain internal cohesion and effectively address global governance challenges. Employing a mixed-method approach that combines quantitative analysis of GDP growth, FDI flows, and trade volumes with qualitative analysis of policy documents and expert opinions, the paper highlights the bloc's growing strategic influence in trade, energy, and geopolitical affairs. Findings suggest that while the inclusion of resource-rich and strategically located nations enhances BRICS' leverage in fostering a multipolar world order, ideological diversity, regional rivalries, and power asymmetries pose significant risks to cohesion. The study argues that BRICS' ability to reshape global governance will depend on establishing flexible, consensus-driven decision-making frameworks and leveraging South-South cooperation.

1. Introduction

The BRIC, an acronym of four emerging economies—Brazil, Russia, India, and China—was officially formed as an alliance in 2009, with the common goal of establishing a powerful platform in global economic governance. South Africa joined the grouping in 2010, making it the BRICS. The alliance was basically created to strengthen the economic

cooperation and promote financial and trade mobility among these rising economies. However, balancing the influence of G7 countries and creating room for the rising powers globally was also the hidden wish of the group. BRICS is distinguished by the large populations of its members, rapidly growing economies, and growing collective political influence on the global stage. Over the years, BRICS has become a symbol of the collective strength of emerging markets, accounting for nearly 42% of the world's population and about 23% of global GDP, highlighting its significance in international affairs [O'Neill 2020].

However, the dynamics within BRICS are evolving as the group have gained new members, signalling a transition phase. The BRICS political and economic environment has seen substantial changes because of this transition. The addition of new members, from different corners of the world, produces both opportunities and challenges, as these new entrants bring different economic priorities, political ideologies, and levels of development. This research examines the impact of this transition on the ability of the BRICS alliance to uphold cohesion and achieve its long-term goals. Understanding how BRICS acclimatizes to these shifts is essential in determining its further relevance in the global order.

In the circumstances, this research focuses on the key question of how BRICS, with its diversifying membership, can maintain internal cohesion and effectively navigate the opportunities and challenges presented by its expansion in a shifting geopolitical landscape. As BRICS struggles to balance the conflicting interests of its current and potential members, this issue is vital to the ongoing discussion over the bloc's future. Originally, BRICS aimed to foster economic cooperation, mobilize infrastructure development, and ensure global financial stability, but it now faces new challenges as through expansion, the grouping includes new members from the Global South. However, this expansion also introduces complexities due to the diverse economic and political landscapes of the new members, which can complicate cohesive policymaking and strategic alignment within the group [Moch 2024]. Therefore, this paper aims to critically analyze the prospects for cooperation that this transition presents and to investigate the potential challenges that may hinder BRICS' progress. The study focuses on key sectors such as economic growth, investment in these countries, mainly, Foreign Direct Investment (FDI), trade liberalization, and political cohesion and affiliation within BRICS. Each of these sectors offers both potential synergies and areas of friction. This analysis attempts to provide insights into how BRICS can play an important role in global governance while navigating its internal complexities.

This paper is organized as follows: A review of the literature on the research topic is presented in the second section. A thorough overview of the theoretical framework will be provided in the third section, with an emphasis on the characteristics of global alliances and economic cooperation. The fourth section will explore the possibilities brought forth by the BRICS transition, looking at areas where collaboration might thrive, including trade, investment, and economic growth. Difficulties will be discussed in the fifth segment, along with how to handle power imbalances within the bloc and manage conflicting political and economic agendas. Conclusions and suggestions will be provided in the latter section, along with suggestions for flexible tactics that BRICS can use to

promote greater unity while taking into account its diverse membership. This study attempts to contribute to the ongoing dialogue on the role of BRICS in the new global order by examining both opportunities and obstacles.

2. Historical evolution of BRICS: A bibliographical review

As the dynamic alliance of emerging states, extensive research has been documented on the BRICS group's achievements and the array of challenges it has faced throughout its journey. Since its inception, BRICS has gathered enough attention for its collective attempt for a multilateral global order, putting the emphasis on challenging Western-led dominance in international institutions. This ambition has materialized in various ways, notably through the creation of alternative financial institutions such as the New Development Bank (NDB) and the Contingent Reserve Arrangement [Saran & Sharan 2012]. Establishment of these institutions is clear evidence of the group's efforts to lessen their dependency on the Western-dominated World Bank and the IMF. The NDB along with the Asian Infrastructure Investment Bank (AIIB) have finished their formation and built large-scale project portfolios [Andronova & Shelepov 2019]. By promoting "South-South" cooperation, the NDB has emphasized infrastructure development, thereby positioning BRICS as a key player in the global development finance landscape [Hopewell 2020].

Promoting the Global South on matters ranging from reform of the multilateral trading system to climate policy has been a key component of BRICS' influence. The need for more egalitarian global governance frameworks has been portrayed as a unified position by BRICS through yearly summits and joint announcements. Scholars argue that the coalition has reshaped the discourse on development finance, pushing for reforms in trade systems that often disadvantage emerging economies [Beeson & Zeng 2018]. The BRICS countries have indeed been vocal advocates for climate justice, emphasizing the need for fair financial support from developed nations to assist developing countries in achieving their climate targets [Shen & Zou 2024]. Despite these successes, some scholars argue that the effective reach of the BRICS' initiatives is still limited, as its members are still reliant on Western institutions for financial and trade norms.

The extensive literature also identifies significant challenges before BRICS, primarily due to the economic and political diversity of its member states. This diversity brings internal contradictions that often complicate the bloc's efforts at cohesive policymaking. For instance, structural differences in their economies—Brazil as a primary resource exporter, China as an industrial and manufacturing powerhouse, Russia's reliance on energy exports, and India's service-oriented economy—create tensions around economic coordination [Stuenkel 2015]. However, any divergent economic policy hampers collective decisions, primarily in sectors like trade policies and tariffs, because in such context, each member may promote differing national interests. The varying levels of economic interdependence between BRICS' members further complicate economic policy coordination, particularly in sectors where their exports compete on global markets [Nye 2013].

In addition, political and ideological differences within BRICS raise predicaments. For example, Russia and China, with their, relatively speaking, more authoritarian systems

of governance, often differ ideologically from members with a more democratic nature like Brazil, India, and South Africa. This contrast complicates BRICS' capacity to present a unified political stance, especially on issues of international security and human rights, where authoritarian and democratic values may come into conflict [Cooper 2016]. These ideological differences often weaken the group's decision-making processes and hinder BRICS' credibility as a cohesive voice for the Global South.

The idea of BRICS expansion has harvested growing interest among scholars, who argue that enlargement holds both opportunities and potential drawbacks. Some observers posit that the inclusion of new states within the group could enhance BRICS' legitimacy, making it a more comprehensive representative of the Global South and thus strengthening its international positions [Hopewell 2020]. By adding new members to the club, BRICS could widen its scope and influence in the United Nations or World Trade Organization. This vast membership could amplify the group's capabilities to drive reform in diverse areas such as trade, climate policy, and development finance.

On the other hand, an extended BRICS raises concerns about its cohesion and operational effectiveness. As the group has already been marked by significant heterogeneity on many occasions, critics contend that expansion could exacerbate existing challenges for the bloc, such as ideological and economic divergences, potentially stalling progress on collective initiatives [Kornegay & Bohler-Muller 2021]. Furthermore, it is also predicted that the elevated complexity in decision-making might hinder BRICS' ability to act as a cohesive group on pressing global issues, thereby weakening its influence on the world stage.

While this extensive literature provides insights into BRICS' successes, challenges, and debates over its growth and possible impact, there is also a notable research gap concerning BRICS expansion and its specific impact on key areas of intra-BRICS cooperation. Few studies have tried to analyze BRICS expansion, but no empirical research has been conducted so far that would examine how the addition of new members would influence economic growth, investment flows, trade trends, political cohesion, and unified action on global issues like climate change, security, and development finance. Apart from this, there is a lack of literature on the possible long-term effects of this expansion on BRICS' institutional efficacy and capacity to serve as a counterbalance to Western-dominated global governance. Filling in these gaps may help us to understand whether a larger BRICS is feasible, and if it can change the global order in the upcoming decades.

3. Theoretical framework

Theoretical perspectives are the lens through which to understand the BRICS phenomenon. Three dominant theoretical perceptions, Realism, Liberalism, and Constructivism provide a distinct lens with which to examine BRICS' expansion and its implications for the global order. These theories offer essential frameworks for understanding the aspirations, dynamics, and potential impact of the bloc's growth on global governance. The Realists view BRICS expansion as a strategic manoeuvre aimed at counterbalancing Western power, particularly the influence of the United States

and other G7 countries. Realist scholars argue that BRICS represents a platform for its members to pool their influence on the global stage, promoting a multipolar world order that can offset Western dominance in institutions like the International Monetary Fund (IMF) and World Bank [Beeson & Zeng 2018; Varela & Delgado 2019]. From this perspective, the expanded BRICS helps to build the club as a stronger voice of the global south, thereby providing it with the strength to challenge the West.

Liberalism, in contrast, emphasizes the ability of BRICS to foster cooperation and promote interdependence among its members, thereby contributing to global stability. Liberal theorists argue that international institutions and alliances like BRICS serve as platforms for collective problem-solving, facilitating trade, economic growth, and shared development goals [Keohane & Nye 1977]. For liberals, BRICS expansion is an opportunity that helps them to enhance their economic cooperation, boost trade liberalization and mobilize resources for infrastructural development. Liberals believe that expanded membership could increase BRICS' capacity to support global economic stability, promote inclusive growth, and create a framework for cooperative engagement with other multilateral institutions.

Constructivist theories add a different dimension by focusing on the role of shared identities, norms and values within BRICS. Constructivists suggest that BRICS is not just a strategic or economic alliance, but a bloc shaped by a collective identity as emerging economies advocating for a more equitable world order [Van Tulder et al. 2016]. Constructivists view BRICS expansion as incorporating a broader range of cultural and political values, enhancing the bloc's legitimacy and representativeness on the global stage [Jones 2024]. However, they also caution that BRICS' diverse political and economic backgrounds may lead to identity conflicts, requiring ongoing negotiation of common values to maintain unity [Cooper 2016]. Collectively, these theoretical viewpoints demonstrate the complexity of the group's expansion. Realist perspectives underline the bloc's strategic objectives. Liberal ideas highlight economic interdependence, and Constructivist methods emphasize common identities and the need to reform global governance. Each perspective contributes to a comprehensive understanding of BRICS as an evolving coalition with both opportunities and challenges as it expands its membership.

3.1. Research methodology

The study employs both quantitative and qualitative analyses to thoroughly evaluate the potential impacts of BRICS expansion on economic cooperation, investment flow, shifting patterns in international trade, and global influence. A longitudinal research design is applied to track the evolution of BRICS over the period and forecast the effects of expansion. The study examines the BRICS group's historical growth and anticipates the future trajectory by evaluating both economic and political indicators. This mixed methods approach provides a well-rounded interpretation of the impact of expansion on internal cohesion of BRICS and its positioning on the global stage.

The data collection process includes both quantitative and qualitative methods. Quantitatively, economic indicators and trade data have been collected from secondary sources, including the World Bank, IMF and United Nations trade databases, to assess

intra-BRICS trade flows, GDP growth rates, foreign direct investment (FDI), and economic interdependence among BRICS members and potential new entrants. For qualitative analysis, content from BRICS summit declarations, policy documents, and official statements are examined to evaluate the coalition's political alignment and thematic focus over time. Additionally, the opinions of scholars, policymakers, and international relations experts from BRICS countries and potential member states have been collected from different sources of news media in order to obtain nuanced perspectives on the political and ideological aspects of expansion.

3.1.1. Data analysis

Both qualitative and quantitative techniques are used in the analysis of the data that was collected. Thematic analysis is used for qualitative data to discover important patterns and insights from the collected opinions. This approach makes it possible to identify recurrent themes and concepts pertaining to ideological alignment, political cohesion, and decision-making difficulties, which promotes a more complex comprehension of the ramifications of BRICS' growth. Simultaneously, quantitative data analysis looks at trade volumes, investment flows and growth indicators within BRICS, using statistical techniques like trend analysis and correlation analysis. These statistical techniques made it possible to identify important trends and relationships that inform the study's conclusions about the economic dynamics within the bloc.

3.1.2. Limitations

The study faced limitations due to potential inconsistencies in data availability across all BRICS nations and potential new members, especially given the varied economic and governance structures of each country. This limitation is acknowledged, and results interpreted accordingly with caution to account for potential variations in future international relations dynamics.

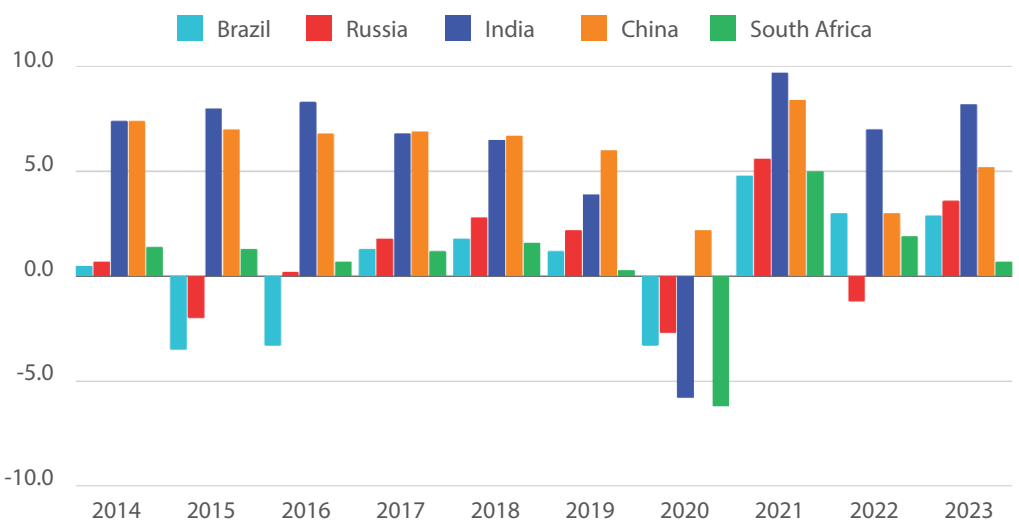
4. Economic analysis of BRICS: Quantitative observations

4.1. The growth trajectory of BRICS

The economic growth trajectory of BRICS has been pivotal to discussions on economic and geopolitical shifts, given the coalition's potential to influence global structures. Since its formation, BRICS has progressed from a loose association to a cohesive group with substantial influence, driven by robust economic growth and the development of supportive institutional mechanisms [Stuenkel 2015]. The coalition's early economic rise was spearheaded by China and India, which saw growth rates averaging over 10% and 7–8% respectively, with Brazil and Russia benefiting from strong commodity exports, albeit with more volatility due to external dependencies [Hopewell 2020]. Collectively, BRICS' economic ascent has allowed it to advocate for greater reform in institutions like the IMF and World Bank to reflect its growing influence [Robinson 2015].

BRICS' economic growth has also been characterized by significant diversity, with China and India expanding into technology and services, while Russia remains reliant on energy and Brazil on agriculture. This diversity has contributed to global trade but poses challenges for internal policy cohesion, particularly with China's rapid growth positioning it as the bloc's leading economy [Pant 2013]. Institutional milestones, such as the New Development Bank (NDB) and Contingent Reserve Arrangement, were established to promote financial independence from Western institutions, supporting South-South cooperation and providing crisis funds for BRICS members [Stuenkel 2015; Acharya 2017]. However, internal political differences and external crises, such as the COVID-19 pandemic, have unevenly affected members, with Brazil and South Africa facing stagnation while India and China showed resilience [Cooper 2016; Beeson & Zeng 2018; Varela, Delgado 2019]. As BRICS contemplates expansion, this trajectory may shift, potentially strengthening its global standing but risking cohesion and decision-making complexities [Narlikar 2020].

Figure 1. Real GDP growth rate (PPP) in BRICS countries during 2014–2024 in %



Source: BRICS Joint Statistics Publication, 2024 & World Bank Open Data available at https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG

BRICS countries have depicted varying trajectories of GDP growth over the period from 2014 to 2023 (see Figure 1 on p. 58), highlighting both times of resilience and times of vulnerability, and elucidating important patterns and obstacles that have influenced each member nation's economic path. Although both China and India have had downturns connected to larger structural and external forces, they typically exhibit the greatest and most consistent development. China's growth exhibits a declining trend pre and during the Coronavirus period. Its growth declined from 7.4% in 2014 to 2.2% in 2020. However, China's economy was enough resilience compared to other Western economies during the pandemic. China is rebounding sharply due to its stringent control measures and

robust fiscal policies. In 2023, China achieved a GDP growth rate of 5.2%, meeting its annual target and underscoring its role as a consistent economic leader within BRICS [Global Times 2023].

India remained as a consistent high growth economy within the BRICS group, upholding high growth rates averaging above 6% before the pandemic hit the world. India's economic reforms, demographic dividend and insistence on infrastructure development bolstered this growth. India experienced a significant downturn in its economic growth trajectory, with the COVID-19 pandemic contributing to a 5.8% contraction in the fiscal year 2020–2021. But the economy illustrated noteworthy resilience by marking a growth rate of 9.1% in 2021–2022 and retaining strong growth at 7.2% in 2022–23. This performance highlights the adaptability of India's service-oriented and diversified economic structure [PIB 2023].

Equally, Russia, South Africa, and Brazil face more fluctuating growth patterns. Brazil's economy experienced a substantial variation throughout the period 2014–2023. With a modest growth in 2014 (0.5%), it faced economic recession in 2015 and 2016 (-3.5% and -3.3%, respectively). This negative GDP growth was majorly affected by political turmoil and a commodity market slump and fiscal imbalances. While the country witnessed a mild recovery from 2017 onwards, jumping by 1.8% in 2018, the economic impact of COVID-19 caused another shock, led to a 3.3% contraction in 2020. Post-COVID recovery was rapid in the following years maintaining growth at 4.8 % (2021) and around 2.9% in 2023 [Carvalho et al. 2023]. However, the fluctuating growth has necessitated drastic reforms in Brazil's economy. Russia's growth trajectory was similarly influenced by external and internal factors. Economic growth in 2014 (0.7%) to -2.0% in 2015 due to fluctuating global oil prices and imposed sanctions following the geopolitical tension with Western countries. Growth was evident from 2016 (0.2%) to 2019 (2.2%), but COVID-19 led to an economic slowdown (-2.7%). The Russian economy managed to recover in 2021 with 5.6% growth rate followed by a new slowdown of 2.1% in 2022, due to the conflict in Ukraine [World Bank 2023].

South Africa's growth, meanwhile, was hindered by structural economic challenges like high unemployment, political uncertainty, and reliance on commodity exports as the major factors behind the scene. GDP growth was hiked at 1.6% in 2018 before the pandemic, facing a contradiction of -6.2% in 2020. Recovery was slow and growth remained far from touching 2% throughout 2022 and 2023, highlighting persistent economic challenges.

These trends underscore a primary challenge for BRICS: maintaining internal cohesion amid diverse economic structures and external dependencies, as well as the importance of stable political and economic policies to support growth trajectories [Acharya 2017]. The data emphasize the heftiness of China and India compared to the volatility in Brazil, Russia, and South Africa. The data also focus on the potentiality for growth within BRICS, while at the same time underlining the challenges that this expansion might bring by considering the existing economic disparities within the bloc.

Overall, the divergent paths show how difficult it is for BRICS to achieve economic cohesion. Although China and India have continued to expand at a rapid pace, the economic instability of South Africa, Brazil and Russia highlights how difficult it is to

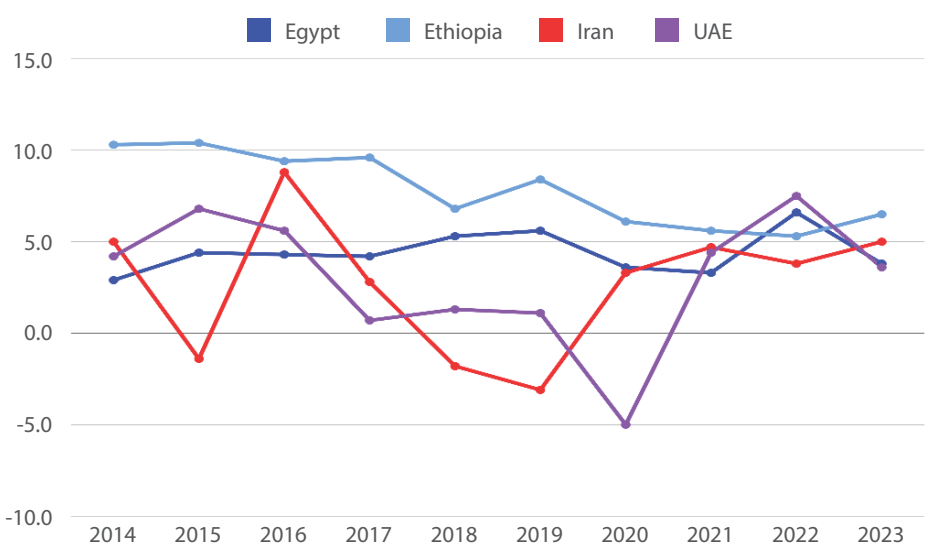
develop a cohesive economic policy within the alliance, given the different economic underpinnings and outside factors that each nation faces. This fluctuation implies that while BRICS is still a substantial economic bloc, its internal economic disparities may limit its ability to act as a cohesive counterbalance to Western economic alliances, if it wishes to do so in the future [World Bank 2023].

4.1.1. New members, new trajectories

However, inclusion of new countries such as Egypt, Ethiopia, Iran, and the United Arab Emirates under BRICS Plus adds new dimensions to the alliance. These new entrants represent diverse economies ranging from resource-based (Iran, UAE) to agrarian and manufacturing driven (Ethiopia, Egypt) models. The comparative GDP (see Figure 2 on p. 60) depicts a clear picture of the economic relations of BRICS with new entrants over the past decade. Their growth trajectories display diversified economic performances, which complements the existing BRICS economies and mitigates risks from sector-specific surprises.

Egypt has exhibited sustained growth rate over the years, with annual rates ranging from 2.9% in 2014 to a high of 6.6% in 2022. This sharp growth rate was hit by the COVID-19 pandemic. However, it succeeded in maintaining stable growth, averaging 3.5% over the decade. This consistent performance reflects its resilience and strength to accommodate global and regional economic realities. Egypt's relatively stable growth reflects the results of its economic reforms that aimed at fostering an investment conducive environment, primarily in infrastructure, which has made it one of Africa's leading economies [Kornegay & Bohler-Muller 2021].

Figure 2. GDP growth rate (PPP) in Egypt, Ethiopia, Iran, and UAE in 2014–2023 in %



Source: BRICS Joint Statistics Publication, 2024 & World Bank Open Data available at https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG

Ethiopia has been able to continue robust economic growth at an average of between 7% and 10% in most years, proving that it is one of Africa's fastest-growing economies. This significant progress is attached to modernization in agriculture, heavy investments in infrastructure, and Ethiopia's strategic location in the Horn of Africa, a pivotal point for trade and regional stability. Despite these trajectories, Ethiopia's growth has dropped 5.3% in recent years, reflecting the result of internal strife, international disruption, and economic pressure. Even though its economic size is far smaller than its other BRICS partners, the growth that the country is experiencing has meant Ethiopia has become a rare example of an African growth story.

Iran's economic trajectory has been highly volatile and influenced by external factors. In 2016, following the adoption of a Joint Comprehensive Plan of Action (JCPOA) and the easing of international sanctions, Iran recorded GDP growth as 8.8%. This positive peak was driven by an increase in oil exports, which served as the backbone of its economy [Reuters 2024]. However, this spike did not last. By the end of 2019, the US's unilateral withdrawal from JCPOA, followed by renewed sanctions by the US government under Trump, meant that Iran's growth trajectory entered into a deep recession, recording a negative growth rate of -3.1%. This happened in the context of international sanctions and the geopolitical tussle. Iran's integration into BRICS not only enhances the alliance's energy security but also strengthens its geopolitical influence in the Middle East, providing opportunities for BRICS, as well as Iran, to keep Western hegemony away from the region.

Compared with other BRICS Plus members, the UAE has shown relatively rational and stable growth. It has experienced notable peaks, with a 7.5% growth rate in 2022, but also witnessed a slowdown in growth to -5% in 2020 during the COVID-19 pandemic. As UAE is a major oil exporter and an international destination for logistics, innovation, and finance, the UAE's economic activism is closely tied to global economic cycles and energy markets.

Five founding members of BRICS collectively represent approximate 35% of the world's GDP, which is higher than the G7's 30% share. With the addition of Egypt, Ethiopia, Iran, and the UAE, BRICS accounts for over 37% of global GDP, substantially increasing its global economic influence. The new entrants together contribute around 1.51% to the global economy, with Egypt's GDP at $477 billion, Ethiopia's at $164 billion, Iran's at $359 billion, and the UAE's at $508 billion [IMF 2024]. Since this represents nearly half the world's population and a substantial share of global trade and resources, this expansion not only boosts the group's contribution to global GDP, but also increases its demographic and geopolitical weight. This further positions BRICS as a critical player in remaking the global economic and political order.

Comparatively, economic growth in the original BRICS countries is moderate as well as steadier due to its broader economic base, whereas smaller economies like Ethiopia witness faster but potentially less stable growth. Its growth scenario shows that the BRICS group may have long-term growth potential, but that it may also experience difficulties in maintaining cohesive policymaking due to its divergent nature. In contrast, countries like Egypt and the UAE, though smaller, may benefit from focused economic reforms and regional stability efforts that position them as potentially important players in an expanded BRICS [Hopewell 2020].

4.2. Investment flow

Investment within the BRICS countries have increased significantly over the past decade, showing the alliance's growing influence and its increasing economic interdependence. During the period, BRICS has welcomed considerable Foreign Direct Investment (FDI) across a wide array of sectors. Driven by economic reforms, a large consumer base, and sectoral strengths, each BRICS nation has contributed to the bloc's collective investment landscape [UNCTAD 2023]. The variation in investment flow has positioned BRICS as a global economic force. It has given BRICS a vision to strengthen their regional collaboration and reduce dependence on the West.

4.2.1. Inward FDI growth and its drivers

The steady growth for inward FDI across the BRICS nations illustrates their increasing appeal to global investors. Inward FDI grew from $300 billion in 2013 to around $540 billion in 2023 [UNCTAD 2023]. This expansion is ascribed to several causes, including broad customer bases, various economic systems, and competitive advantages across industries. The largest economy in BRICS, China, has benefited greatly from inward FDI, especially in the industrial and technology sectors. Multinational firms have been drawn to set up production facilities in China due to its sizable domestic market and robust manufacturing capabilities, which has fuelled industrial growth and enabled China's continuous economic progress [World Bank 2023]. Similarly, India has witnessed substantial FDI inflows. India's policy reforms, which have liberalized key sectors and made it easier to do business, have made it a prime destination for foreign investors, especially in the information technology and pharmaceutical sectors, where India plays an important role in global supply chains [UNCTAD 2023].

Brazil and Russia have also been an attraction for inward FDI flows. Brazil's interest to investors is largely determined by its powerful agricultural and energy sectors. Brazil has become a key exporter of soybean, sugarcane, and ethanol, especially to China and India, as demand for these resources grows [Valdes 2022]. Contrarily, Russia has witnessed consistent investment in natural resources and energy, which continue to be important pillars of its economy. Russia's energy exports to China and India highlight its function as an energy supplier to the BRICS, particularly since Western sanctions have caused trade flows to shift [EIA 2023]. South Africa's inward FDI flows, though smaller, have focused on mining, manufacturing, and services, with its strategic location and developed infrastructure acting as significant draws for foreign investors [AUC/OCD 2022].

4.2.2. Outward FDI and the BRICS group's expanding influence

Outward FDI from BRICS countries has grown from approximately $150 billion in 2013 to $250 billion in 2023, reflecting BRICS' strategic objective of expanding its economic footprint globally [UNCTAD 2023]. The two main sources of this outbound FDI are China and India, with China's investments closely aligning with the Belt and Road Initiative

(BRI). Building infrastructure throughout Asia, Africa, and Latin America is the main goal of China's BRI investments, which surpass over $300 billion worldwide. This establishes a network of trade routes that improve China's resource access and trade connectivity [World Bank 2023]. India has also increased its outward FDI, focusing on neighboring countries and African markets, where it has made investments in technology, pharmaceuticals, and renewable energy. Growing outward trade strengthen India's ability to support its economic growth and thereby enhance its regional leadership.

4.2.3. What are the FDI trends for new BRICS members?

The addition of new members to the BRICS grouping has certainly extended the bloc's investment potential, by introducing additional resources, strategic trade routes, and new markets into the BRICS fold. These have brought distinct opportunities in sectors like energy, infrastructure, and finance, aligning with BRICS' objectives to foster sustainable and autonomous economic growth. While Egypt and Ethiopia have seen significant FDI in manufacturing and infrastructure owing to their strategic locations and developmental needs, the UAE, with its advanced financial services and commitment to renewable energy, has brought substantial capital and resources to the bloc.

Collectively, additional members galvanize the BRICS group's urge for investment in different sectors. They support the group's ability to achieve diversified but sustainable growth. By pooling resources and creating investment-friendly policies, the expanded BRICS group aims to amplify its collective bargaining power in global trade and attract investments that strengthen regional ties [World Bank 2023]. Each of these countries brings unique strengths, contributing to the bloc's overall appeal for FDI in energy, manufacturing, and infrastructure.

Iran

While international sanctions have constrained Iran's FDI inflows, the country still attracted around $1.5 billion in 2022, marking a 5% increase on previous years [Tehran Times 2023]. Iran's rich natural resources, particularly in oil, gas, and mining, offer considerable FDI potential if sanctions ease. In the Middle East, Iran remains the fourth-largest recepient of foreign investment, just behind the Saudi Arabia, Oman, and Bahrain. Another point in Iran's favour is its strategic location. Iran provides access to both Middle Eastern and Asian markets that make it conducive to attract foreign investors and manufacturers.

Egypt

FDI inflows to Egypt have steadily risen, with the country receiving approximately $9 billion in FDI in 2022, representing a 5% increase on the previous year [UNCTAD 2023]. Egypt's strategic location, combined with its current efforts to make economic reforms, has made Egypt newly attractive for international investment, particularly in the energy, infrastructure, and manufacturing sectors. The Suez Canal Economic Zone has drawn considerable investment as it remains a critical hub for global trade and logistics [World Bank 2023].

Ethiopia

Ethiopia's rapid industrialization and large consumer market have led to significant FDI growth. In the 2022/23 fiscal year, Ethiopia attracted around $3.6 billion in 2022 [The Ethiopian Herald 2023]. Investment has primarily flowed into manufacturing (textiles and garments), agriculture, and infrastructure. Iran's push for industrial parks, rapid industrialization, and a large-scale consumer market has galvanized this growth. This has made it an attractive destination for foreign investors.

United Arab Emirates (UAE)

As a regional investment hub, the UAE continues to be a top FDI destination in the Middle East, with FDI inflows reaching $20.7 billion in 2022 [World Bank 2023]. The UAE's strategic location, developed infrastructure, and business-friendly policies attract FDI in real estate, tourism, finance, and technology. Its proactive policies, stable economy, and environment, conducive for investment, has made it favorable for FDI.

4.2.4. What is the impact of BRICS expansion on FDI trends?

Expansion is likely to influence FDI trends in different ways. First, the addition of new states enhances the regional and sectoral diversification of the BRICS grouping. The new countries infuse substantial resource wealth and access to strategic trade routes. For example, the UAE brings oil and natural gas to the group, while Egypt controls the Suez Canal, which provides the alliance with an important strategic maneuver. This geographic and sectoral expansion will likely attract FDI flows into sectors like energy, logistics, and infrastructure, which are crucial for bolstering trade connectivity across the Middle East, Africa, and Asia [World Bank 2023]. The bloc's overall appeal is enhanced by this diversification, which appeals to global investors seeking to mitigate the risks associated with single-sector or single-region investments.

Second, since some of the biggest energy exporters in the world are now part of the expanded BRICS, investments in infrastructure and energy are strengthened. This increases chances of more inward FDI flow in energy sector, particularly in countries like China and India. Therefore, these countries can secure more stable and direct access to vital resources. Renewable energy and sustainable infrastructure are other areas where FDI flow is likely to grow as the UAE shifted their investment focus toward green energy investments, aligning with global trends. BRICS' development banks and initiatives to improve intra-bloc connectivity will help infrastructure investments, particularly in Ethiopia and Egypt, and encourage FDI in major infrastructure projects [UNCTAD 2023].

Third, the inclusion of UAE, enabling flow of potential FDI through non-Western channels that will reduce BRICS reliance on Western Financial System, as the UEA is one of the largest facilitators of trading through non-USD currencies. This will increase the group's ability to facilitate trade and investments using local currencies and thereby reduce their dependency on the USD. Investors looking to avoid USD-related currency volatility may find BRICS an attractive investment target, encouraging increased FDI flows within the bloc and toward BRICS-aligned projects globally [Tehran Times 2023].

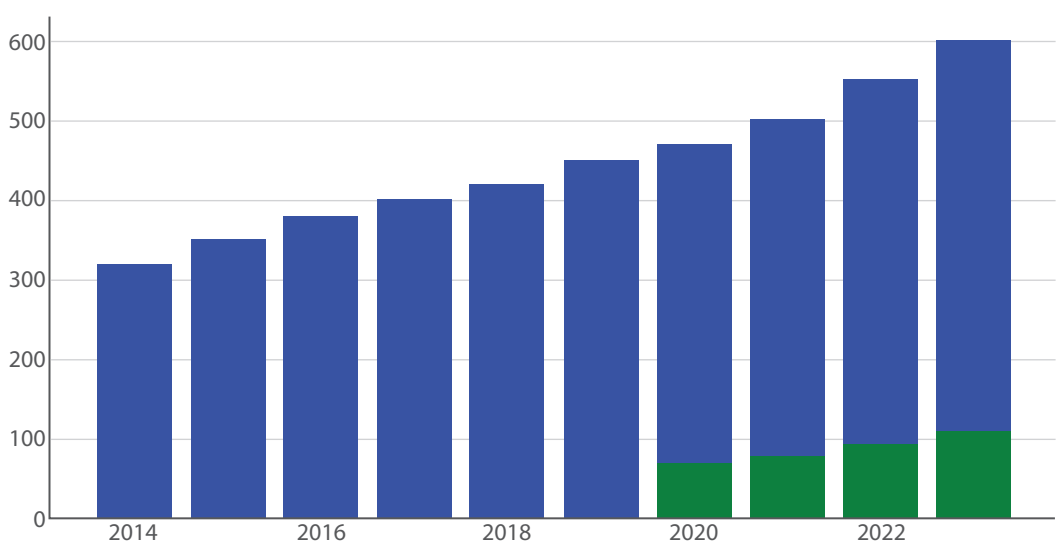
This currency diversification can stabilize FDI trends and create new avenues for capital within emerging markets.

In short, the BRICS group's expansion is not only poised to alter FDI trends through enhanced sectoral diversity, promoting investment in energy and infrastructure sectors, but also to offer alternatives to Western-dominated financial systems. This transformation increases BRICS' attractiveness to global investors, as well as promoting the coalition's objective to become a self-sustaining, differentiated union capable of redesigning global investment flows.

4.3. Trade liberalization

Trade has been the core contributor in BRICS' overall development. Trade has shown continuous growth among BRICS countries, reflecting the group's increasing economic interdependence and collaborative efforts in regional trade. The graph below (see Figure 3 on p. 65) shows that the contribution of the countries that became new BRICS members in 2024 to the trade volume of the enlarged BRICS has been growing in recent years. This continuous development may be attributed to stronger economic ties, increased trade infrastructure, and policies targeted at lowering trade barriers within BRICS. Reliance on the USD has decreased and trade flows have become more seamless because of efforts to settle intra-BRICS transactions in local currencies. The bloc's growing prominence in global trade networks is evidenced through the substantial growth of intra-BRICS trade.

Figure 3. Trade volume among BRICS countries and contribution of new members (data from 2020), 2014–2023, $ billion



Source: BRICS Joint Statistics Publication, 2024 & World Bank Group data available at https://data.worldbank.org/country/iran-islamic-rep?view=graph

Several factors have contributed to enduring growth in BRICS trade volumes, well attributed in the complementary nature of BRICS economies. Each member country specializes in sectors that fulfill essential needs across the bloc. China's largest contribution in driving BRICS trade is a notable factor in this expansion. Being the second-largest economy in the world, China is heavily involved with its BRICS partners for transferring electronics, machinery and textiles while importing energy, minerals, and agricultural goods from Brazil, Russia, and South Africa. China's trade volume with Brazil reached $140 billion by 2022, dominated by imports of soybeans and iron ore to fuel its industrial needs [World Bank 2023; IMF 2023]. Brazil primarily exports agricultural commodities like soybean and sugarcane to China, its agricultural exports to China surpassing $50 billion in 2022. Additionally, Brazil's energy resources, such as ethanol and oil, contribute to trade stability within the bloc, notably through exports to India, further reinforcing BRICS' economic resilience [Valdes 2022].

With its proficiency in digital technology, pharmaceuticals, and IT services, India has increased its influence within BRICS. India is positioned as a major healthcare supplier to BRICS and beyond thanks to its $25 billion in pharmaceutical exports in 2022. In the meanwhile, Russia's enormous energy reserves have highlighted its importance as the bloc's main energy supplier, as seen by the $40 billion in oil shipments it sent to China in 2023 alone. By exporting vital minerals like gold and platinum, South Africa completes this synergy and provides China and India with vital resources for industrial production. By 2023, South Africa's exports to China alone were valued at around $20 billion, further highlighting the strategic complementarity of BRICS economies in supporting economic growth and reducing reliance on Western markets [EIA 2023].

The addition of Iran, Egypt, Ethiopia and United Arab Emirates (UAE) to the BRICS group has further accelerated the growth in trade volume. It is adding strategic value to the group's economic footprint. If we go back to the 2020 data, the new members contributed around US$70 billion to BRICS trade volume in that year. The growth in Iran's trade with BRICS, especially India and China, has been impacted by Iran's oil resources. In the fiscal year 2022–2023, Iran's trade with BRICS jumped approximately $38.43 billion, with China being the largest trading partner at $30.32 billion, followed by India at $4.99 billion [Gulf Today 2023].

As far as the UAE is concerned, it has significantly established itself as global logistics hub, channeling a flow of goods within and beyond the BRICS members. It is therefore facilitating global trade. In 2024, the UAE's non-oil trade reached a record 3 trillion dirhams ($817 billion), marking a 14.6% increase on the previous year [Reuters 2025]. The UAE's increasing investment in trade infrastructure therefore strengthens its economic partnership with the BRICS nations.

The collective contribution of these new members to trade during 2020 to 2023 adds up to approximately US$355 billion. It marks a remarkable addition to BRICS' overall trade volume. This integration conforms with the BRICS group's broader goals to enhance trade resilience, diversify its economic base, and build a globally influential trade network that can serve as an alternative to Western-dominated trade systems [BRICS Joint Statistical Publication 2023].

The expanded BRICS group also brings strategic value to its new members. Below is an in-depth discussion of the key trade drivers for each new member.

Iran

As one of the biggest producers of natural gas and oil in the world, Iran has become an essential energy partner for BRICS, particularly for China, whose yearly crude oil exports total more than US$14 billion. Iran has maintained robust trade flows with the BRICS nations despite Western sanctions, circumventing these restrictions through non-USD transactions, strengthening economic connections and trade stability [EIA 2022]. Iran's strategic location also adds value, as BRICS members like India are expected to increase their energy imports from Iran to reduce dependence on oil sources controlled by the West. This unifies with the BRICS group's larger goals of strengthening intra-bloc economic independence.

Egypt

Egypt's control over the Suez Canal, which handles around 12% of global trade, provides BRICS with a key logistical advantage by reducing transit times between Asia, Africa, and Europe [UNCTAD 2022]. Egypt's strategic benefit aligns with BRICS' vision to enhance market accessibility, since member countries can sidestep longer routes and optimize shipping costs. It facilitates smoother trade flows across continents. Additionally, Egypt's large consumer base, with over 104 million people and a GDP of approximately US$400 billion, offers BRICS countries access to a growing market and aligns with the group's aim to support sustainable industrialization and regional development [World Bank 2023].

Ethiopia

Ethiopia, as a gateway to East Africa, offers BRICS states access to a rapidly industrializing economy and a crucial consumer market of nearly 125 million people. Benefiting from steady economic growth averaging 8–10% annually up to 2020, BRICS countries are keen to invest in Ethiopia, particularly in sectors like energy, mining, agriculture, and manufacturing [Mekonnen 2024], which paves the way for BRICS into Africa. Strengthening trade relations with BRICS countries provides Ethiopia with access to larger markets for its exports, allowing for increased trade volumes and potential economic growth [Mekonnen 2024].

UAE

The UAE's varied economy, estimated at over US$500 billion, provides substantial strength to BRICS by uniting its energy market with robust sectors in finance, logistics, and re-exports. Its strategic location as a bridge between Asia, Africa, and the Middle East increases its significance for the alliance. As one of the vital financial and logistic hubs in the World, the UAE boosts BRICS' trade and investment capabilities. The port of Jebel Ali, one of the world's busiest ports, streamlines intra-BRICS trade by providing efficient re-export channels, thus expanding BRICS' logistical network and fostering increased trade efficiency across member nations [World Bank 2023].

By leveraging the energy and resource wealth of Iran and the UAE, along with the strategic trade routes of Egypt and Ethiopia's swift industrialization, BRICS can enhance its collective economic influence and decrease dependence on Western-dominated trade networks. This expansion positions BRICS as a significant global economic bloc with the potential to foster a more multipolar world trade structure.

4.4. Political cohesion and the motives of BRICS expansion

New motivations, an increase in cultural and ideological diversity, and strategic implications make this expansion as a pivotal moment for the BRICS bloc. This expansion of BRICS aligns increasing sentiments in the Global South to create a platform that balances Western dominance in global institutions. This gives BRICS a way to voice better the interests of the Global South at the international level. As Russian Foreign Minister Sergey Lavrov (2024) stated, bringing in a wide range of developing countries to cooperate with BRICS "will help to further consolidate efforts of the world majority to solve common problems in the common interest" [Spanger 2024]. Mauro Vieira, Brazil's Foreign Minister, believes (2023) that expansion is "underscoring the bloc's desire to serve as a counterweight to Western-dominated structures" [EFE 2023].

This expansion, however, brings ideological diversity, as the new nations have distinct political systems, from democracies to more centralized regimes. As French President Emmanuel Macron (2023) argues, this ideological variety can complicate consensus-building among BRICS members, as diverse governance models may hold conflicting perspectives on issues such as human rights, governance, and economic policies [Curtis 2024]. Scholars like Narlikar [Narlikar 2023] caution that these internal differences could hinder BRICS ability to function as a unified bloc, potentially leading to policy stagnation if consensus on key issues proves elusive. This issue will necessitate BRICS to develop robust frameworks to balance these ideological differences and ensure that the decisions of the group shall reflect the collective interests of all its members.

The expansion of the BRICS alliance, encompassing critical nations of the Middle East and Africa, is a strategic move that could challenge the traditional dominance of Western alliances and potentially reshape global power dynamics [The Wire 2023]. However, the expansion of BRICS has garnered fear among western leaders. For example, in Macron's view, "the expansion of the BRICS bloc of the world's largest emerging economies also creates the risk of a 'fragmentation of the world'," he said during a conference of ambassadors at the 15th BRICS summit [Sputnik News 2023]. However, geopolitical analysts warn that strategic rivalries among BRICS members, particularly between China and India, may complicate efforts to present a unified geopolitical stance [Stuenkel 2023]. One of the most pressing challenges for the expanded BRICS group is cohesion. As the power rivalry between India and China increases, small states may face increased pressure to align with one of them, which could marginalize the interests of smaller states and exacerbate internal tension within the group [Paul 2018]. As these asymmetries continue, it could lead to an imbalance in decision-making, in which smaller states feel sidelined in the group's discussions and decision-making. To deal with this emerging challenge, BRICS will need to establish a governance framework that offers equitable

representation and respects the interests of each member country of the group. Such mechanisms are necessary for maintaining the alliance's unity and preventing divisions that could weaken its effectiveness on the global stage.

Global governance is another area in which there are serious concerns about the expansion of BRICS, as it signals a shift toward a multipolar world order where emerging economies have a greater say. The creation of the New Development Bank (NDB) has demonstrated BRICS' potential to alter Western-dominated institutions. This bank aligns with the interests and needs of the countries from the Global South. This may increase the influence of emerging markets in shaping global policies on trade, climate, and development, ultimately creating a more inclusive international system [Seiwert 2024]. Nonetheless, the alliance must navigate its ideological and economic diversity carefully to ensure that it remains a cohesive and constructive force.

5. Research findings and discussion

The expansion of BRICS introduces a new phase of growth and complexity for the alliance. It brings both promising opportunities and formidable challenges to the group. This research investigated the motivations that drove the BRICS expansion, how the ideological diversity impacted the geopolitical implications of a larger BRICS, what challenges lie before attaining cohesion within the bloc, and the potential influence on global governance structures. These findings highlight the potential of an expanded BRICS to shape a multipolar world order, while also underscoring the internal and external dynamics that could complicate this goal.

5.1. Motivations for economic and strategic expansion

The expansion of BRICS, particularly with the inclusion of Middle Eastern countries, reflects a deliberate move toward a more multipolar global order. This expansion is not merely a shift away from Western influence, but a strategic diversification of economic, diplomatic, and security partnerships [Janardhan & Haqqani 2024]. By adding new members to the club, BRICS wields greater collective economic wealth. By integrating major energy exporters, the BRICS has created a new strategic pivot in global politics. With strategic assets like the Suez Canal and increased economic diversity thanks to the UAE's financial know-how, Ethiopia's growing manufacturing sector, and Iran's energy resources, the addition of these nations fortifies BRICS' resource and trade infrastructure. This increased membership addresses the need for diverse economic cooperation between countries in the Global South. It reduces the reliance of these countries on Western markets, and challenges established global economic structures. BRICS countries build partnerships based on equality, openness, cooperation, and mutual benefit. This is in line with the underlying trend toward greater democracy in international relations and meets the core interests of the Global South [China Daily 2024]. Adding new members from Africa, the Middle East, and Asia, BRICS has gained greater strength, to better amplify the voices of emerging economies that have traditionally been marginalized in Western-dominated institutions.

5.2. Shifts in FDI trends

The expansion of BRICS has transformed the bloc into an even more attractive destination for global investment. In addition to reflecting the growing confidence of international investors, FDI flows to BRICS countries have climbed from $300 billion in 2013 to $540 billion in 2023. This development is a result of BRICS' expanded variety in terms of resource availability, sectoral and geographic advantage [UNCTAD 2023]. China and India continue to be major recipients and initiators of foreign direct investment (FDI), and China's Belt and Road Initiative (BRI) is helping to increase BRICS' global influence in developing markets. Since the UAE is a major global financial centre with a strong logistical network, the recent addition of the UAE adds a new advantage in terms of funding sources [World Bank 2023].

All this inspires growth in FDI flow into sectors such as infrastructure development, green energy projects, and regional development. Moreover, inward FDI within BRICS is increasingly directed toward sustainable projects, aligning with UAE's goals to shift its investment strategies toward renewable energy investments and sustainable infrastructure. This shift not only strengthens intra-BRICS cooperation in critical growth areas but also positions BRICS as a viable alternative to the Western-led investment landscape [EIA 2023].

5.3. Trade liberalization

BRICS Plus heralds a substantial increase in trade volume and liberalization opportunities, fueling economic interdependence and empowering the bloc to establish a distinct trading network. BRICS' trade volume rose from approximately $320 billion in 2014 to $600 billion by 2023, a trend largely facilitated by measures to reduce dependence on the US dollar and promote local currency transactions among members [BRICS Joint Statistical Publication 2023]. This rapid growth exhibits not only increased intra-BRICS economic integration, but also the strategic imperatives of addition of new members to the bloc, as each of them distinctively makes their own special contribution. Iran and the United Arab Emirates, being significant oil exporters, contribute to the energy security of the BRICS and facilitate easier trade with countries like China and India, which have high energy needs to fuel their industrial sectors. Additionally, Egypt's control over the Suez Canal facilitates more efficient trade routes and lower transportation costs. It also makes Egypt a vital trade link between the BRICS nations and international markets. The liberalization of trade supports a resilient economic interdependence among the BRICS nations that seeks freedom from Western-led traditional systems. This objective is crucial for current rising geopolitical tensions and currency fluctuations affecting global markets. By promoting trade in local currencies and focusing on essential resources and industries, BRICS is building a more self-sustaining economic bloc.

5.4. Challenge to cohesion

The inclusion of countries with diverse political systems, ranging from centralized, state-led economies to democratic and market-driven systems, has introduced

significant ideological diversity within BRICS. Scholars argue if members fail to reach to a consensus on issues of contest, the bloc may experience policy paralysis that could hinder the growth and influence of the BRICS. For instance, Jim O'Neill, who invented the term BRICS, has criticized the group for lacking cohesiveness in the alliance; he stated that rivalry between China and India hinder the group's effectiveness. He emphasizes that without serious cooperation among members, especially China and India, BRICS cannot function as a unified entity capable of challenging existing global structures [Faulconbridge 2024].

Ideological diversity among members is likely to hinder the consensus on issues such as human rights, political issues, and economic policies. This would make it difficult for BRICS to take a collective position on global issues. For example, while some member countries may prioritize economic liberalization, others may emphasize state control over key industries. To manage this diversity, BRICS may need to develop an adaptable governance structure that allows for varying degrees of policy congruence while honoring each member's unique political and economic beliefs. This may mean formulating decision-making guidelines that prioritize consensus while allowing for opt-out processes in the case of major disputes. Such flexibility could enable BRICS to proceed with initiatives that align with the collective interests of its members without being hindered by ideological disagreements.

5.5. Geopolitical implications: Expanding strategic influence

The inclusion of new members with strategic geographical positions and resource wealth broadens BRICS' reach and influence in the world. A new geopolitical standing enables BRICS to assert wider influence over global trade routes and energy markets. However, BRICS does not want to challenge the existing system of governance directly, but instead wishes to reform its institutions in order to make the global order more fair, equitable and democratic [Larionova 2018]. BRICS acts in a cooperative manner, seeking to make the international financial architecture and global regulation more representative and responsive to emerging markets and the needs of developing economies [Larionova & Shelepov 2022].

But as the expanded BRICS offers more strategic leverage, it also introduces complexities associated with regional rivalries. Scholars like Stuenkel (2023) suggest that geopolitical tensions between large BRICS economies, such as India and China, could hamper the bloc's cohesion. For instance, India's concerns over China's Belt and Road Initiative in Pakistan Occupied Kashmir[1] have already created points of contention within the bloc. India sees CPEC as an infringement upon its sovereignty and territorial integrity, and has protested against the project by not attending the Belt and Road Forum meetings in 2017, 2019 and 2023.

This rivalry has created friction with the BRICS alliance. India continues to oppose the BRI, while Russia and South Africa remains neutral, and Brazil has shown less interest in the project. India continued to be apprehensive regarding the violation of

[1] The name the Government of India and Indian sources refer to the territory of Kashmir under Pakistan control – *Ed.*

its sovereignty in BRICS meetings held in Xiamen (2017) and Johannesburg (2023). India further countered the BRI by creating alternative projects like the India—Middle East—Europe Economic Corridor (IMEC) [Sharma 2019].

To mitigate these tensions, BRICS may need to embrace a pragmatic approach that emphasizes economic cooperation over political alignment, focusing on shared goals in areas like infrastructure, trade, and sustainable development. After all, it is clear that the trajectory of the alliance will hinge upon the effective management of such difficulties while, in parallel, advancing collective cooperation.

5.6. Implications for global governance: Toward a multipolar world

An enlarged BRICS remains crucial for global governance, as it seeks to offer an alternative to IMF and the World Bank. By creating new financial structures like the New Development Bank (NDB), and the Contingent Reserve Arrangement (CRA), supported by trade agreements that bypass the USD, BRICS can reduce its dependency on Western financial systems, creating a more resilient and self-sustaining economic bloc [IMF 2023]. This shift toward a multipolar world aligns with the interests of many developing nations, who view BRICS as a platform for challenging Western hegemony in international institutions [Seiwert 2024]. However, the BRICS must overcome its internal challenges and put up a united front to accomplish this goal. However, the bloc's impact on global governance will depend on how it acts cohesively on issues of global commons such as climate change, trade regulations, and financial reform. If BRICS can successfully tackle its ideological diversity and regional rivalries, it has the potential to reshape the global order by promoting policies that prioritize the needs of the Global South.

6. Conclusion and recommendations

The expanded BRICS group now wields increased economic power, integrating vital resources, strategic trade routes, and financial hubs, all of which align with the bloc's goal of establishing a more multipolar world order. The coalition's expansion is a response to the view that the Western international order does not satisfactorily accommodate the interests of emerging economies. By including new members, BRICS aims to create a more inclusive global governance structure that reflects the economic weight and perspectives of developing countries. By creating a platform that represents the Global South, BRICS can better advocate for inclusive and equitable economic policies, ultimately working toward a global order that prioritizes the developmental needs of underrepresented nations.

However, the assimilation of countries with diverse political ideologies and economic priorities introduces complex dynamics that could potentially hinder BRICS' cohesion. Members with varying political systems, ranging from democracies to centralized, state-led economies will be the defining challenge to the BRICS collective position. To address this, BRICS must develop a flexible governance model that accommodates varied policy approaches, allowing for consensus-driven decision-making while respecting each

member's political system [Alden & le Pere 2024]. By creating frameworks that emphasize consensus-building in areas of fundamental disagreement, BRICS can mitigate policy paralysis and maintain unity. Furthermore, dealing with power asymmetries between China and India and newly added smaller members like Ethiopia and Egypt is essential for fostering a sense of shared ownership. Implementing rotating leadership roles, with the presidency of BRICS lasting one year only, sector-specific committees led by smaller members, and shared decision-making processes can help balance various interests. This would avoid the dominance of any single member within the bloc, ensuring that all voices are heard and represented.

The economic impact of BRICS Plus is evident in the noticeable shift in the patterns and trade volumes of foreign direct investment (FDI) that reflects the group's growing influence in the global economy. To sustain and further continue this growth, BRICS countries need to encourage policies that support sustainable investments and regional connectivity. Promoting trade in local currencies, as already observed with increased intra-BRICS transactions bypassing the USD, can reduce currency risks and strengthen economic independence.

In terms of geopolitics, the enlarged BRICS has established itself as a powerful force that can compete with Western influence in global governance, trade, and energy. By prioritizing economic cooperation over political alignment and concentrating on common objectives in infrastructure, trade, and sustainable development, BRICS can improve unity [Stuenkel 2023]. Adopting a pragmatic approach through creating channels of dialogue that facilitate cooperation and conflict resolution among members may help to develop political cohesion among members. Additionally, keeping engaged in strategic partnerships with non-member states and regional organizations will be helpful to exert BRICS' global reach and reinforce its commitment to a multipolar world.

The enlargement of BRICS enables it to promote a fresh approach to global governance that opposes the existing structure, which is dominated by the West. By developing alternative financial systems and governance mechanisms, BRICS can support developing nations' economic independence and reduce reliance on traditional Western institutions. BRICS should promote the development of the NDB and other financial tools that give the needs of the Global South priority in order to cement this change. In doing so, the bloc can establish itself as a legitimate alternative to institutions like the IMF and World Bank, empowering emerging economies to pursue development goals aligned with their needs and aspirations [Sugihartono 2024].

Lastly, an expanded BRICS holds great potential for advancing a multipolar world order, encouraging economic resilience, and advocating for the Global South. However, accomplishing these goals necessitate managing internal challenges related to ideological diversity, power asymmetries, and geopolitical rivalries. By accepting a flexible, inclusive governance model and focusing on shared economic goals, BRICS can navigate these intricacies and enhance its role in global governance. Through strategic endeavors and partnership, BRICS has the potential to rebuild the international system, fostering a more inclusive and balanced global order that prioritizes the interests of emerging economies and developing nations.

Bibliography

Acharya, A., 2017. After Liberal Hegemony: The Advent of a Multiplex World Order. *Ethics & International Affairs*, 31(3), pp. 271–285. Available at: https://doi.org/10.1017/S089267941700020X.

Alden, C., le Pere, G., 2023. Southern multilateralism from IBSA to NDB: Synergies, continuities and regional options. *Global Policy,* 15, pp. 389–397. Available at: https://doi.org/10.1111/1758-5899.13246.

Andronova, I., Shelepov, A., 2019. Potential for Strengthening the NDB's and AIIB's Role in the Global Financial System. *International Organizations Research Journal,* 14(1), pp. 39–54. https://doi.org/10.17323/1996-7845-2019-01-03.

AUC/OECD, 2022. Africa's Development Dynamics 2022: Regional Value Chains for a Sustainable Recovery. OECD Publishing, Paris. Available at: https://doi.org/10.1787/2e3b97fd-en.

Beeson, M., Zeng, J., 2018. The BRICS and global governance: China's contradictory role. *Third World Quarterly,* 39(10), pp. 1962–1978. Available at: https://doi.org/10.1080/01436597.2018.1438186.

BRICS Joint Statistical Publication, 2023. BRICS: Annual Economic Trends. Shanghai: BRICS Secretariat. Available at: https://brics.ibge.gov.br/downloads/BRICS_Joint_Statistical_Publication_2023.pdf.

Carvalho, C.E., Massaroli de Melo, T., Daldegan, W., 2023. Post-Covid Brazil and the new government: Economy and foreign policy. *BRICS Journal of Economics,* 4(1), pp.97–116. Available at: https://doi.org/10.3897/brics-econ.4.e99448.

China Daily, 2024. *Why is BRICS so popular among Global South countries?* Available at: https://www.idcpc.org.cn/english2023/opinion/202411/t20241108_165925.html.

Cooper, A. F., 2016. *The BRICS: A Very Short Introduction.* Oxford: Oxford University Press. Available at: https://doi.org/10.1093/actrade/9780198723394.001.0001.

Curtis, J., 2024. *The BRICS group: Overview and recent expansion.* Research Briefing. Available at: https://researchbriefings.files.parliament.uk/documents/CBP-10136/CBP-10136.pdf (accessed 18 February 2025).

EFE, 2023. *BRICS advocate multipolar order.* Available at: https://efe.com/en/latest-news/2023-06-01/brics-advocate-multipolar-order/.

EIA, 2023. *Energy Outlook: Global Trends.* Available at: https://www.eia.gov/outlooks/ieo/pdf/IEO2023_Release_Presentation.pdf.

Ethiopian Herald, 2023. *Ethiopia's FDI inflow grows by 3.64% in 2022/23 FY: Commission.* Available at: https://press.et/herald/?p=80748&utm_source=chatgpt.com (accessed 18 February 2025).

Faulconbridge, G., 2024. *Exclusive: BRICS is for the fairies until China and India get serious, 'Mr BRICS' says.* Available at: https://www.reuters.com/world/brics-is-fairies-until-china-india-get-serious-mr-brics-says-2024-10-23/.

Global Times, 2023. *China achieves 5.2% GDP growth in 2023, successfully meeting yearly target.* Available at: https://www.globaltimes.cn/page/202401/1305536.shtml?id=12&utm_source=chatgpt.com.

Gulf Today, 2023. *UAE, BRICS members' non-oil trade reaches Dhs555 billion in 2022.* Available at: https://www.gulftoday.ae/business/2023/08/25/uae-brics-members-non-oil (accessed 18 February 2025).

Hopewell, K., 2020. *Breaking the WTO: How Emerging Powers Disrupted the Neoliberal Project.* Stanford, CA: Stanford University Press. Available at: https://doi.org/10.1515/9781503600027.

International Monetary Fund (IMF), 2023. *World Economic Outlook database. Navigating Global Divergences*. Available at: https://www.imf.org/en/Publications/WEO/Issues/2023/10/10/world-economic-outlook-october-2023.

International Monetary Fund (IMF), 2024. *World Economic Outlook Database.* Available at: https://www.imf.org/en/Publications/WEO.

Janardhan, N., Haqqani, H., 2024. *The Expansion of BRICS Signals Shift Away from the West, Not a Turn against It.* Available at: https://thehill.com/opinion/international/4956421-the-expansion-of-brics-signals-shift-away-from-the-west-not-a-turn-against-it/.

Keohane, R. O., Nye, J. S., 1977. *Power and Interdependence: World Politics in Transition.* Boston, MA: Little, Brown.

Kornegay, F. A., Bohler-Muller, N., 2021. *Laying the BRICS of a New Global Order.* Pretoria: HSRC Press.

Larionova, M., 2018. The G20, BRICS and APEC in the System of International Institutions: A Piece of Good News for Global Governance. *International Organisations Research Journal*, 13(1), pp. 7–33. Available at: https://iorj.hse.ru/en/2018-13-1/214013060.html.

Larionova, M., Shelepov, A., 2022. BRICS, G20 and global economic governance reform. *International Political Science Review,* 43(4), pp. 512–530. Available at: https://doi.org/10.1177/01925121211035122.

Mekonnen, W., 2024. Ethiopia and BRICS: Prospects and Challenges. *Journal of Political Science and International Relations*, 7(3), pp. 59–74. Available at: https://doi.org/10.11648/j.jpsir.20240703.12.

Moch, E., 2024. The Economic and Geopolitical Significance of the Brics Nations: A Comparative Analysis of Their Global Influence in the 21st Century. *East African Journal of Business and Economics*, 7(2), pp. 86–100. Available at: https://doi.org/10.37284/eajbe.7.2.2310.

Narlikar, A., 2020. *Poverty Narratives and Power Paradoxes in International Trade Negotiations and Beyond*. Cambridge: Cambridge University Press. Available at: https://doi.org/10.1017/9781108234191.

Nye, J. S., 2013. *BRICS Without Mortar.* Available at: https://www.project-syndicate.org/commentary/why-brics-will-not-work-by-joseph-s--nye.

O'Neill, J., 2020. *The Growth Map: Economic Opportunity in the BRICS and Beyond*. London: Penguin.

Parliamentary History, 2024. Clyve Jones (1944–2024), 43(3). Available at: https://doi.org/10.1111/1750-0206.12761.

Paul, T. V., 2018. When Balance of Power Meets Globalization: China, India, and the Small States of South Asia. *International Affairs*, 94(1), pp. 141–156. Available at: https://doi.org/10.1177/0263395718779930.

Press Information Bureau (PIB), 2023. *Indian economy exhibits resilience with strong growth performance*. Available at: https://pib.gov.in/PressReleasePage.aspx?PRID=1942795.

Reuters, 2024. *Iran election hopefuls struggle to offer fix for economic woes*. Available at: https://www.reuters.com/world/middle-east/iran-election-hopefuls-struggle-offer-fix-economic-woes-2024-06-26/?utm_source=chatgpt.com.

Reuters, 2025. *UAE leans on trade deals for growth as non-oil trade jumps 15% in 2024*. Available at: https://www.reuters.com/world/middle-east/uae-leans-trade-deals-growth-non-oil-trade-jumps-15-2024-2025-02-05/ (accessed 18 February 2025).

Robinson, W. I., 2015. *Global Capitalism and the Crisis of Humanity*. Cambridge: Cambridge University Press, Available at: https://doi.org/10.1017/CBO9781107590250.

Saran, S., Sharan, V., 2012. *Banking on BRICS to Deliver.* Available at: https://www.thehindu.com/opinion/lead/banking-on-brics-to-deliver/article3248200.ece.

Seiwert, E., 2024. *Anti-Western or Non-Western? The Nuanced Geopolitics of BRICS*. Available at: https://thediplomat.com/2024/10/anti-western-or-non-western-the-nuanced-geopolitics-of-brics/.

Sharma, M., 2019. India's approach to China's Belt and Road Initiative—Opportunities and concerns. *The Chinese Journal of Global Governance*. 5(2), pp.136–157. Available at: https://brill.com/view/journals/cjgg/5/2/cjgg.5.issue-2.xml.

Shen, Q., Zou, X., 2024. Evolution of Cooperation among BRICS Countries in Global Climate Governance: From UNFCCC to the Paris Agreement. *MGIMO Review of International Relations*, 17(1), pp. 65–85. Available at: https://www.vestnik.mgimo.ru/jour/article/view/3616/2561.

Spanger, H.-J., 2024. *Longing for status: Russia celebrates its BRICS chairmanship*. Available at: https://blog.bti-project.org/2024/10/18/longing-for-status-russia-celebrates-its-brics-chairmanship/ (accessed 18 October 2024).

Sputnik News, 2023. *Macron says BRICS expansion aimed at changing world order perceived as "too Western."* Available at: https://en.sputniknews.africa/20230828/macron-says-brics-expansion-aimed-at-changing-world-order-perceived-as-too-western-1061697689.html.

Stuenkel, O., 2015. *The BRICS and the Future of Global Order*. London: Lexington Books.

Stuenkel, O., 2023. *BRICS expansion would be a sign of China's growing influence, says Oliver Stuenkel.* Available at: https://www.economist.com/by-invitation/2023/08/18/brics-expansion-would-be-a-sign-of-chinas-growing-influence-says-oliver-stuenkel.

Sugihartono, S., 2024. *The Current Potential of BRICS in Challenging Western Hegemony.* Available at: https://infobrics.org/post/42093/news/civilbricsforum/news/bankbrics/.

Tehran Times, 2023. *FDI inflow to Iran rises 5% in 2022: UNCTAD.* Available at: https://www.tehrantimes.com/news/486386/FDI-inflow-to-Iran-rises-5-in-2022-UNCTAD?utm_source=chatgpt.com.%20Accessed%20on%20February%2018,%202025.

The Wire, 2023. *BRICS expansion finalised as Egypt, Iran, Ethiopia, Argentina, Saudi and UAE invited to join*. Available at: https://cms.thewire.in/world/diplomacy/brics-expansion-finalised-as-egypt-iran-ethiopia-argentina-saudi-and-uae-invited-to-join.

UNCTAD, 2023. *World Investment Report 2023.* Geneva: United Nations Conference on Trade and Development.

Valdes, C., 2022. *Brazil's Momentum as a Global Agricultural Supplier Faces Headwinds.* Available at: https://www.ers.usda.gov/amber-waves/2022/september/brazil-s-momentum-as-a-global-agricultural-supplier-faces-headwinds.

Van Tulder, R., Carneiro, J., Gonzalez-Perez, M.A., 2016. *Introduction to This Volume: What Makes BRIC Multinationals Special?* Leeds: Emerald Group Publishing Limited. Available at: https://doi.org/10.1108/S1745-886220160000011005.

Varela, A. H., Delgado, R. G. M., 2019. The BRICS in the Contemporary Global Order: Objectives, Capabilities, and Limitations. *Otoritas: Jurnal Ilmu Pemerinta han.* 9(2). Available at: https://doi.org/10.26618/ojip.v9i2.2106.

World Bank, 2023. *World Development Indicators*. Washington, D.C.: World Bank.

International Trade under "Slowbalization": Latest Trends

Elena Sapir, Alexander Vasilchenko

Elena Sapir — professor, head of the Department of World Economy and Statistics, P.G. Demidov Yaroslavl State University.

Scopus Author ID: 56529364900
ORCID: 0000-0002-2754-0985

Alexander Vasilchenko — junior researcher at the Institute of Europe of the Russian Academy of Sciences, postgraduate student of the Department of World Economics and Statistics, P.G. Demidov Yaroslavl State University

Scopus Author ID: 57219454963
ORCID: 0000-0002-4904-1562

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Abstract

This article presents the results of a comparative analysis of global trends in world trade after the global financial crisis of 2008–2009, with special focus on the balance of macroregions in international trade, their self-sufficiency in the supply of intermediate goods, and the growing role of services in the transformation of the architecture of economic globalization at the current stage. The research methodology was based on quantitative indicators of trade openness, geographical concentration and participation in global value chains. As a result, it was found that since 2009, international trade openness has been declining in Asia, remaining at precrisis levels in North America and increasing in Europe, with Asia displacing Europe as the largest macroregion in terms of merchandise exports. Asia and North America strengthened the regional component of value chains during this period, while Europe increased its dependence on external intermediate supplies. It is found that international trade in services continued to grow in absolute and relative terms after 2009. China and India have been integrating into the "service" segments of value chains

at a faster pace, strengthening their weight in relation to developed countries. It appears that the growth potential of international trade in services is far from being exhausted. It is this sector that could be the engine of the future wave of economic globalization.

Introduction

In recent decades, the world economy has undergone multidirectional trends in the development of intercountry commodity exchange and cooperation. Two of these factors have garnered particular interest from researchers. The terms "hyperglobalization" and "slowbalization" are often used to describe the increasing interconnectedness of the global economy and the growing influence of global markets. Hyperglobalization is defined in the extant literature as a process of accelerated densification of trade and production ties between countries and regions of the world. This process is accompanied by a rapid growth of exports in relation to GDP, increasing countries' interdependence in global value chains (GVCs), and a burgeoning influence of multinational enterprises (MNEs) [Antràs 2020]. Conversely, slowbalization is manifested in decelerating development of established and practical trade and economic ties between nations [Linsi 2021]. The term's semantic content frequently encompasses the processes of strengthening protectionism and increasing autonomy of the national economy [Benabed, Moncea 2024]. In the Report of the European Parliament for 2020, slowbalization is contemplated within the framework of five dimensions: trade in goods and services, an open financial system, the exacerbation of inequality, tourism and migration, and the digitalization of the economy and society [Kononenko et al. 2020]. Concurrently, the term "slowbalization" is broadly deemed in the literature to be synonymous with "deglobalization" or "fragmentation." It is our contention that the latter two categories reflect conceptually different processes. Deglobalization, understood as the process opposite to globalization, is defined as a weakening of the unity and integrity of the world economic system through the strengthening of regional and local trade and economic, investment, monetary, financial, infrastructural, and other economic cooperation between countries. Fragmentation, in turn, implies the isolation of territorial economic entities in the context of the distorting trade and economic relations among the leading global economic actors. As it will be demonstrated subsequently in the paper, at the present moment, there is inadequate evidence to support the propositions of deglobalization or fragmentation in the world economy.

The period of hyperglobalization is associated with the end of 20th – beginning of 21st century. The volume of world exports for 25 years increased from 5 to 16 trillion dollars. Its share in world GDP increased from 16 to 25% [UNCTAD Stat]. During this period, world economic relations were undergoing a transformation under the "second unbundling," namely the simultaneous reduction of control and coordination costs [Baldwin 2016]. Between 1995 and 2007, the cost of storing information in a computer plummeted from $5 million to $20,000 per terabyte.[1] Technological innovations enabled

[1] Our world in data. Historical price of computer memory and storage. Available at: https://ourworldindata.org/grapher/historical-cost-of-computer-memory-and-storage (accessed 23 November 2024).

multinational firms to pursue extensive outsourcing policies, which gave a significant boost to trade in intermediate products. Over the same period, developed countries' exports of intermediates grew from about $300 million to about $1.5 trillion [UNCTAD Stat]. Meanwhile, it is worth recognizing that the unfolding of global value chains at this stage took the form of a mesh of dense regional production networks; linkages between macroregions were critical but not dominant [Stephenson 2013].

However, as experts underscore, the terminal point of the hyperglobalization era was the global financial crisis of 2008–2009. The collapse of the US banking system inflicted a cascade of multidirectional destructive shocks that painfully affected the real sector of the economy in most countries of the world. Such a resounding shock to the world economy shattered illusions about the infinite multiplication of the benefits of economic globalization. Both large companies and national governments have been challenged to reprioritize their cooperation with foreign partners. The policy of economic reindustrialization [Capello, Cerisola 2023], manifested in the reshoring of production and fostering of the developed countries' domestic resource and technological base in critical industries, became the cumulative form of response to external shocks. States and businesses sought to reduce dependence on foreign counterparties or to "simplify" and "shrink" trade and cooperation ties in order to throttle the channels of shock propagation. An additional incentive for reshoring was the reduction of costs in Western countries for operations previously offshored to Southeast Asia driven by an automation and technological development.

Meanwhile, the 2008–2009 crisis itself was not the sole driver of the slowdown in economic globalization. For example, the growth of China's position in the world economy was increasingly supported by domestic sources, which was reflected in the growth of the average labor remuneration in the country. While in 2010 the gap between China and the US was about 7 times, by now it has narrowed to about 3 times.[2] In the post-crisis period, R&D expenditures in relation to GDP in China increased by 1 p.p. (from 1.5% to 2.5%); Chinese corporations now receive about $10 billion in annual revenues for the use of intellectual property, which is 10 times higher than in 2010.[3] Under these conditions, the benefits of outsourcing production from developed countries to China have come to naught; moreover, multinational enterprises in the United States and Europe are facing the challenge of technological competition from the Chinese "Celestial Empire." Thus, the "factory China" model of trade and production globalization has *de facto* faded into oblivion.

However, it seems that the underlying causes of the slowdown in economic globalization lie in the exhaustion of the organizational and technological potential of global expansion in tangible production sectors. Production fragmentation in sectors such as automobiles or electronics has reached its natural limits, where further fragmentation of individual operations becomes problematic [Brakman, van Marrewijk 2022]. The potential for geographical expansion of material production has also shrunk

[2] The Conference Board. The Conference Board International Labor Comparisons. Available at: https://www.conference-board.org/ilcprogram/index.cfm (accessed 20 December 2024).

[3] World Development Indicators. Available at: https://databank.worldbank.org/reports.aspx?source=2&Topic=14# (accessed 04 November 2024).

significantly. The multilink GVC architecture of the hyperglobalization period, served by an extensive network of international maritime logistics, proved unviable amidst supply chain disruptions. For instance, according to UNCTAD estimations,[4] the increase in the cost of maritime transportation in 2020 has led to an annual increase of 1.7% in average world prices for consumer goods and 3.3% for intermediate goods. Last but not least, significant technological convergence in the world economy of the hyperglobalization period could, following Torrens' law of diminishing trade [Torrens 1821], cause an increase in the share of non-traded goods in the world GDP.

At the same time, it appears reasonable to maintain that the slowbalization of the world economy is not a precondition for deglobalization and fragmentation, but rather a natural attribute of globalization manifesting an essential transformation of its underlying mainstays. The article aims at a comparative analysis of global trends in world trade in the aftermath of the crisis of 2008–2009 and revealing the growing role of services in the transformation of the architecture of economic globalization at the present stage.

Literature review

Modern scientific works pay close attention to the problem of development of international trade and global value chains in the period after the global financial crisis. Aspects of rebalancing the role of principal actors in the world economy, as well as potential drivers of further development of trade and economic cooperation between countries are critically dissected.

As V.G. Varnavskii [Varnavskii 2024] notes, in the post-crisis period the dynamics of international trade desynchronized with the world GDP, which demonstrated steady growth before the COVID-19 pandemic crisis. This phenomenon, according to the author, explains the growth of competition in the world commodity markets and the subsequent strengthening of trade protectionism. Varnavskii also points out that international trade has reached a certain "stationary state" and the potential for further growth has been exhausted. At the same time, in the second decade of the 21st century the problem of trade imbalances between countries and regions of the world has become pronounced. Since 2010, the cumulative average annual global current account deficit amounted to about $1.2 trillion [UNCTAD Stat]. This trend is particularly evident in Europe [Giovanetti et al. 2023]. The region's economies in the post-2009 period have collectively run substantial trade deficits with China in both consumer goods (about $120 billion per year) and, most importantly, capital goods with the average annual deficit increased from $60 billion in 2009 to $120 billion in 2021 [UNCTAD Stat]. A.V. Kholopov [Kholopov 2022] articulates the following reasons for the growth of trade imbalances: the bias toward consumer spending as a driver of GDP growth in the United States, the growing propensity for deferred consumption against the background of the aging world's population, as well as the global savings glut triggered by limited capacity of financial markets in developing countries.

[4] UNCTAD. Review of Maritime Transport 2021. Available at: https://unctad.org/system/files/official-document/rmt2021_en_0.pdf (accessed 15 December 2023).

In the aftermath of the crisis of 2008–2009, the trend toward regionalization of the trade in finished and intermediate products become more pronounced. A.A. Maltsev [Maltsev 2024] in his paper stresses that in recent years domestic production of finished goods in the United States significantly outstrips its import from Asian countries with traditionally low production costs. Meanwhile, in the author's opinion, reshoring still has not established itself as the modus operandi of developed economies at the present stage; the processes of branching of economic globalization shreds occur in new forms, although "reshoring" economies accelerate the "vicious circle" of value chain compression.

A recent IMF study [Gopinath et al. 2024] also underscores the limited nature of the closure of trade and production ties at the present stage. According to estimations, the intensity of trade between political blocs is currently decreasing in relation to intra-bloc trade, but the scale of weakening is not comparable to the Cold War period. As the authors of the report note, geo-economic fragmentation neither at the current stage nor in the past has facilitated deglobalization. That said, the nature of this speculative contradiction is diverse. The fragmentation of the mid-20th century manifested itself through regional economic fragmentation within political blocs; subsequently, international trade underwent a rapid surge with the integration of Eastern European countries into the world economy. Today, however, the situation looks different. The relative sustainability of trade on a global scale is ensured by the so-called "connector countries" that ensure value-added spillovers. Both examples illustrate the prevalence of centripetal forces in the world economy, which is not conducive to the implementation of localization strategies.

A rather sharp criticism of how GVC regionalization processes are reflected in the academia is presented in the work of B. Thakur-Weigold and S. Miroudot [Thakur-Weigold, Miroudot 2024]. The authors consistently challenge the thesis that foreign sourcing reduces the sustainability of the value chain. The line of argumentation grounds on empirical evidence revealing that during crises economies sustaining a dense network of trade links mitigating the negative shock managed to recover faster and adapt to new challenges. According to the researchers, global value chains have become so complex and filled with unique country-specific technologies in recent decades that localization of critical links in the chain today appears unfeasible for any country. For this reason, the authors conclude, reshoring affects primarily assembly plants; it only redistributes, not eliminates, risks across the value chain.

Nonetheless, this view of the international trade resilience has a downside. Field experts note the growing share of so-called "bottleneck products" with low elasticity of substitution and a high degree of geographical concentration of supply. According to Borin, Mancini and Taglioni [Borin et al. 2021], pharmaceuticals and computer production are the most exposed to the risk of bottleneck products supply shortages. In addition, the estimated model suggests that participation in the GVCs reduces the negative effects of shocks to the national economy and trade in final goods while increasing the susceptibility to disruptions in production linkages that can cascade to other sectors of the economy. The cornerstone position of China in the supply chain of bottleneck products is highlighted in the work of R. Baldwin [Baldwin et al. 2023]. Based on the original index of on external imports' dependence, the reliance of the US

industry on supplies from China after 2009 increased approximately 1.5 times, the similar dependence of Germany and Japan doubled.

The magnification of GVC related risks in industrial sectors also unbalanced modes of integration in certain macroregions. To note, the EU countries manage to effectively reduce dependence on external critical supplies through functional diversification of national economies. At the same time, these strategies are implemented under low international coordination, which undermines the sustainability of economic integration [Coveri, Zanfei 2023].

To recap, the authors by and large agree that economic globalization is far from being over. It is also speculated that the current slowbalization is merely a specific phenomenon that will not alter long-term trends [Roudometof 2024]. The current stage of economic globalization is probably a period of its transformation. As rightly outlined by E. Marvasi [Marvasi 2023], "in the new type of globalization, security and resilience matter more than mere efficiency as businesses need to find reliable partners in countries linked by stable relationships." Meanwhile, the mainstream discourse in the literature tends to assess trade and GVCs from the perspective of material flows. It is likely that the new wave of trade and economic cooperation between the countries will take place in intrinsically different planes of the world economy. This paper attempts to trace some promising development paths of future economic globalization.

Methodology

In order to answer the research question, the authors applied a number of quantitative methods allowing for uncovering structural imbalances in how countries and regions participate in international trade and global value chains.

First, the basic indicators of foreign trade in goods of the enlarged regions of the world—Asia, Europe and North America are calculated. The region's share in world merchandise exports, as well as the export quota indicator (formula 1), which reflects the importance of foreign demand for the formation of national income are estimated.

$$Q_i = \frac{X_i}{GDP_i} \times 100\,\% \tag{1}$$

Where i – macroregion of study, Q_i – commodity export quota, X_i – commodity exports, GDP_i – GDP. The indicator takes values from 0 to 100, where 100 corresponds to the absolute dependence of the country's national income on foreign demand.

The paper further assesses indicators of the efficacy of mobilizing labor resources to solidify the region's position in international trade. In particular, the ratio of the region's share in international trade to its share in the world population is studied. A value of the indicator greater than one indicates that the region utilizes labor to expand trade connections more effectively than the average of all countries in the world, and vice versa.

Specific attention is paid to the indicators of GVC participation of countries and enlarged regions. At the level of macroregions, the change in the value added content of

domestic commodity exports produced by other regions is assessed (formula 2). Positive values of the indicator trigger increased regional economy's dependence on foreign intermediate supplies, and vice versa.

$$I_{ji} = \left(\frac{VA_{ji_1}}{X_{i_1}} - \frac{VA_{ji_0}}{X_{i_0}}\right) \times 100 \quad (2)$$

Where i is the exporting region, j is the region of value added origin, VA_{ji} is j's value added in i's merchandise exports, X_i is i's merchandise exports.

Similar analysis is conducted at the national level within individual macroregions. Reconfiguration of regional value chains, as well as rebalancing of inter-country production linkages are investigated.

For the five largest economies of the world by GDP in current prices for 2023, namely China, the United States, India, Germany and Japan, the change in the GVC position of individual sectors is assessed. For this purpose, the dynamics of the vertical specialization index [Hummels et al. 2001] is studied (formula 3), which allows for an identification of tangible production sectors in which the country is more actively involved in cooperation with third countries.

$$VS_i^p = \frac{1}{X_i^p} A_i^M L_i X_i \quad (3)$$

Where VS_i^p – indicator of vertical specialization of country i in sector p, X_i^p – exports of sector p of country i, A_i^M – matrix of technical coefficients of imports of country i, L_i – "Leontief inverse" for internal production linkages of country i, X_i – total exports (goods and services) of country i. The indicator takes values in the range from 0 to 1, where growth indicates an increase in the country's dependence on imports for the production of exported goods and services.

At the final stage of the study, the frontier aspects of international trade in services are studied. In particular, the export quota indicator, reflecting the contribution of services exports to the regions' GDP, is also estimated. Then the degree of concentration of exporting countries in international trade in services is analyzed by quantifying the Herfindahl-Hirschman index (formula 4). It is assumed that increasing geographical concentration indicates the dominance of a limited number of countries, which reduces the opportunities for other players to establish additional trade and cooperation linkages.

$$HH = \sum_{i=1}^{I} \left(\frac{X_i}{X}\right)^2 \quad (4)$$

Where HH– Herfindahl-Hirschman index, X_i– country i exports of goods (services), X– world exports of goods (services).

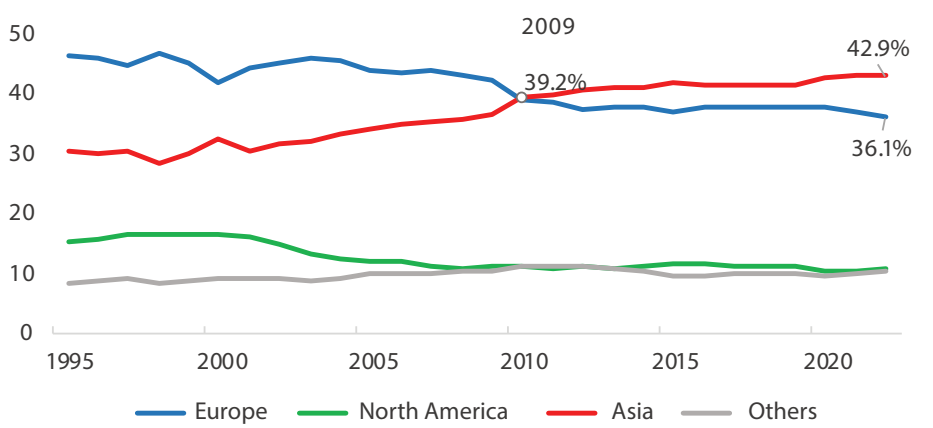
Finally, the share of value added of business services (R&D, engineering, etc.) incorporated in merchandise exports of macroregions is estimated. The research hypothesis is that with the advent of Industry 4.0 and widespread adoption of automated and digital technologies, an increasingly large portion of value of final products is

attributable to manufacturing services that maintain production and perform specific functions (e.g. robot manipulators).

Results

In the aftermath of the global financial crisis, a notable shift occurred in the leading region in world merchandise trade. Europe's preeminent position was superseded by Asia, primarily at the expense of China (see Figure 1 on p. 84). In 2009, the regions' shares in world merchandise exports were almost equal (39% each), but in recent years, Asia's share has been approximately 7 percentage points higher than Europe's. North America's involvement in global merchandise trade remains marginal, underscoring the region's persistent reliance on domestic consumption as a primary contributor to its GDP.

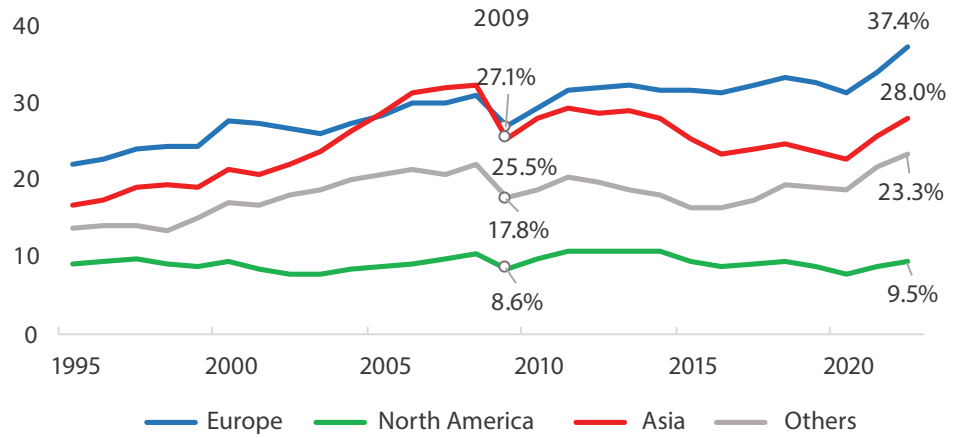
Figure 1. Share of the region in world merchandise exports, %



Source: authors' elaboration on UNCTAD Stat.

Considering the prevailing trend of slowbalization, numerous experts frequently cite the export quota indicator, which has remained static since 2009 in the calculation of global exports. Concurrently, within the context of specific regions worldwide, it is evident that while the indicator exhibits a decline in Asia following a period of accelerated growth from 1995 to 2009, the ratio of total exports from European countries to GDP is growing steadily at a rate comparable to the period of hyperglobalization (refer to Figure 2 on p. 85). The dynamics of the indicator for Asia can be attributed to the increase in domestic demand in China, as well as the superior growth of domestic investment. Moreover, the Chinese economy has fallen into the so-called "middle-income trap," and China's exported products have lost their former competitiveness on the international market. Europe's GDP is contingent on external markets, suggesting that the regional economy exhibits inadequate capacity.

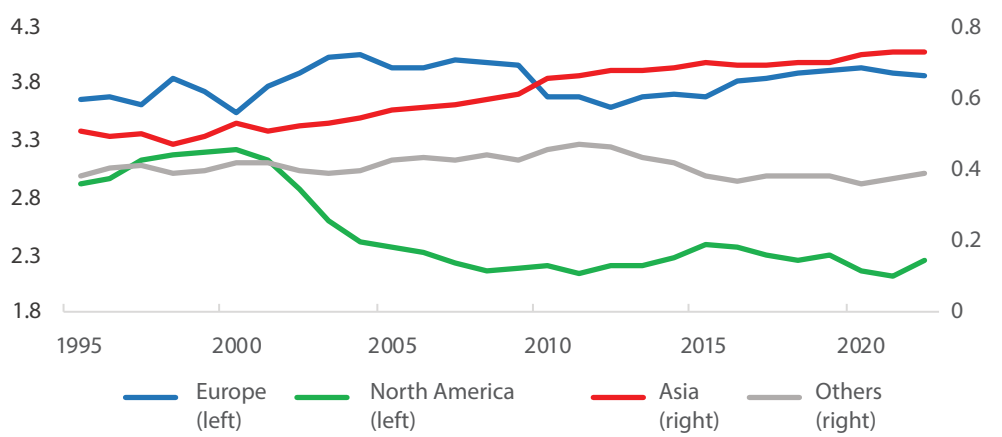
Figure 2. Share of merchandise exports in GDP by world regions, %



Source: authors' elaboration on UNCTAD Stat.

As shown in Figure 3 on p. 85, the ratio of the Asian region's share in world merchandise exports to its share in world population has exhibited a consistent increase throughout the observation period, approaching unity after 2009. As long as China is concerned, this phenomenon can be attributed, in part, to the observed decline in fertility rates over recent decades. Concurrently, the analogous indicator for Europe exhibits a substantially higher level. The region's contribution to global merchandise exports is approximately fourfold its contribution to global population.

Figure 3. Ratio of the region's share of world merchandise exports to the region's share of world population

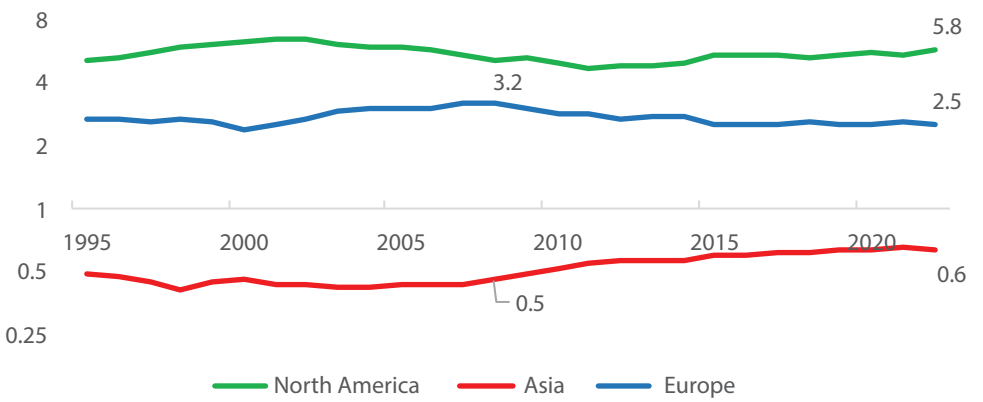


Source: authors' elaboration on UNCTAD Stat.

With respect to global GDP, the state of events appears to be somewhat different. While the contribution of the United States and Europe to world GDP is an order of magnitude higher than their contribution to world population (5.8 and 2.5 times, respectively), Asia's share in world GDP is slightly more than half of its share in world

population (see Figure 4 on p. 86). However, the positive dynamics of the indicator for Asia (+20%) denotes an increase in the efficiency of utilizing the region's labor resources for value creation. A negative trend has been observed in Europe. From 2009 to 2021, the ratio of the region's share in world GDP to its share in world population decreased by 22%, symbolizing a decline in the overall competitiveness of the European economy.

Figure 4. Ratio of the region's share of world GDP to the region's share of world population



Source: compiled by the authors on the basis of UNCTAD Stat.

The post-global financial crisis structural shifts in global value chains are also regionally specific (see Table 1 on p. 86). During the period of hyperglobalization, the regional component of value added of merchandise exports contracted in Asia, Europe, and North America. Put differently, each region established robust cooperative networks with other regions globally. Nonetheless, during the period of globalization in Asia and North America, there was an observable trend of accelerated growth in domestic value added relative to foreign value added. Consequently, the regions reinforced their autonomy in the production of exported goods. Meanwhile, Europe persisted in augmenting the external component of export value added from 2007 to 2019, thereby fortifying its reliance on foreign suppliers.

Table 1. Value added growth in exports of world regions, p.p.

Region of origin of value added	Exporting region					
	East and South-East Asia		Europe		North America	
	1995–2007	2007–2019	1995–2007	2007–2019	1995–2007	2007–2019
Africa	0.1	-0.1	0.1	0.0	0.1	-0.2
East and South-East Asia	**-4.9**	**2.1**	0.8	1.1	0.1	-0.1
Europe	0.9	-0.7	**-2.7**	**-2.2**	0.5	-0.6
North America	0.0	-0.6	0.5	1.1	**-1.9**	**1.7**
South and Central America	0.5	-0.1	0.1	0.1	0.2	-0.1
Other countries	3.4	-0.6	1.3	0.1	1.0	-0.8

Source: authors' elaboration on OECD TiVA data.

On the level of individual countries, more detailed facets of the transformation of value-added flows in the world can be traced (see Table 2 on p. 87). From 1995 to 2007, European countries experienced a rapid increase in intermediate inputs from regional partner countries. The regional component of value added exhibited a substantial growth in exports of Germany, Spain, and Russia. In the aftermath of the 2008–2009 economic crisis, the regional contribution to merchandise exports remained stagnant or experienced a decline for the majority of European economies, with notable exceptions including the Netherlands and, to a certain extent, Russia. Based on the evidence presented, one can conclude that the potential of European value chains to boost regional exports during the period of globalization has been fully realized.

The evolution of regional value chains in Asia and North America over the post-crisis period exhibited distinct characteristics. Japan's role as an intermediary exporter to South Korea and China has experienced a notable shift. Japan's value-added contribution to these countries' exports shrank by 21% and 8%, respectively, during the period from 2007 to 2019. Concurrently, Japan has also confined its cooperative ties with South Korea while increasing its dependence on China. During the period of globalization, production relations between China and South Korea exhibited a marked expansion at a relatively high rate. As for North America, the dissolution of its cooperative ties has not been observed among any pair of counterpart countries. While the relationship between the United States and Canada appears to be stagnant, Mexico and the United States are proportionately advancing their value-added interchange.

Table 2. Value added growth in exports of countries in selected regions of the world, times

1995–2007							
Country of origin	**France**	**Germany**	**Italy**	**Netherlands**	**Spain**	**UK**	**Russia**
France	1.88	2.76	1.87	1.37	2.55	1.65	3.83
Germany	2.28	2.21	2.42	1.38	3.19	1.94	5.47
Italy	2.32	2.78	1.88	1.48	3.1	1.95	4.18
Netherlands	1.89	2.77	2.23	1.84	2.66	1.85	4.07
Spain	3.1	3.8	3.4	1.95	2.59	2.84	4.31
UK	2.24	3.62	2.53	2.41	3	2.28	5.29
Russia	5.46	7.46	4.26	4.5	7.43	4.62	4.18
2007–2019							
Country of origin	**France**	**Germany**	**Italy**	**Netherlands**	**Spain**	**UK**	**Russia**
France	1.11	1.04	0.88	1.32	1.04	1.01	1.33
Germany	1.07	1.18	0.92	1.69	0.94	0.99	1.05
Italy	0.89	1.02	1.02	1.61	0.79	0.81	1.18
Netherlands	1.2	1.28	0.99	1.25	1.24	0.93	1.3
Spain	1.13	1.26	1.07	1.65	1.27	1.02	1.45
UK	0.99	0.92	0.62	1.48	0.87	1.06	0.99
Russia	0.95	1.28	1.16	2.07	0.67	0.78	1.33

1995–2007							
Country of origin	**Japan**	**South Korea**	**China**	**Country of origin**	**Canada**	**Mexico**	**US**
Japan	1.5	2.32	8.81	Canada	2.38	5.33	2.74
South Korea	3.84	2.63	13.92	Mexico	2.66	3.15	3.64
China	12.15	12.65	7.93	US	1.57	2.39	1.93
2007–2019							
Country of origin	**Japan**	**South Korea**	**China**	**Country of origin**	**Canada**	**Mexico**	**US**
Japan	1.11	0.79	0.92	Canada	1.08	1.28	1.02
South Korea	0.96	1.52	1.47	Mexico	1.86	1.65	1.4
China	1.59	2.26	2.37	US	1.26	1.59	1.52

Source: authors' elaboration on OECD TiVA data.

Today, the participation of the world's largest economies in GVCs has idiosyncratic features. Germany, as the predominant contributor to European industry, marginally reliant on foreign intermediate supplies in the domains of tangible production, specifically in machinery. At the same time, the provision of country's business services, chiefly R&D, is facilitated by foreign entities. Japan exhibits a level of reliance on foreign partners in manufacturing sectors, particularly in the field of transportation engineering, that is one order of magnitude greater than that observed in Germany. India's engagement in global value chains (GVCs) is minimal within the primary sectors of the economy. However, in the services sector, the nation maintains close collaboration with foreign suppliers. A comparison of the modes of US and Germany GVCs participation reveals some common features. For example, both countries are actively engaged in international cooperation in R&D, engineering, and consulting services. China is distinctive in that its reliance on global value chains, measured in relative terms, is currently the greatest among the countries under study. The most extensive embeddedness in cooperative relations with third countries is observed in the chemical products and electronics sectors, as well as in business services. The provision of financial services by Chinese banks and other organizations is also facilitated by foreign partners. The nation's thriving transportation manufacturing sector is noteworthy for its substantial degree of self-sufficiency.

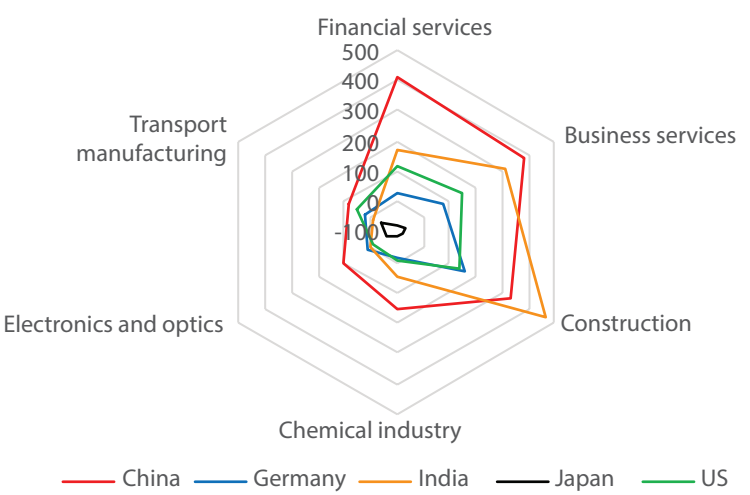
Table 3. Vertical specialization index of selected countries, breakdown by industry, %, 2023

sector	**China**	**Germany**	**India**	**Japan**	**US**
Chemical industry	12.77	1.49	5.81	4.38	3.65
Construction	0.93	2.99	5.33	0.87	0.71
Electronics and optics	16.76	1.43	0.81	4.96	1.26
Financial services	8.63	3.48	6.23	3.75	5.53
Business services	10.73	17.53	2.95	8.12	18.80
Transport manufacturing	4.11	2.69	0.87	7.30	1.96

Source: authors' elaboration on ADB MRIO 2023 data.

Following the global financial crisis, there has been a notable shift in the pattern of the five economies' participation in the global value chains (GVCs) (see Figure 5 on p. 89). In particular, the phenomenon of vertical specialization has been most distinctive in the services sector. China has firmly established cooperative linkages in the financial and business services. A substantial upgrading of India's position in global value chains is evident in the construction sector. The United States and Germany have also developed external cooperative linkages in the production of intangibles; however, the dynamics of these linkages were considerably lower than those observed for China and India. Yet, in the industrial sectors, the United States and Germany maintained balanced relationships with foreign partners. Noteworthy is the case of Japan. The country, which traditionally exploited the advantages of the global intermediate goods and services market, has resorted to the actual curtailment of external production ties in all the aforementioned sectors. Nevertheless, there is a general tendency to employ GVCs in the intangible sector of the world economy, a phenomenon that is actively supported and balanced by developing countries.

Figure 5. Change in the vertical specialization index of selected countries, breakdown by industry (2011–2023, %).

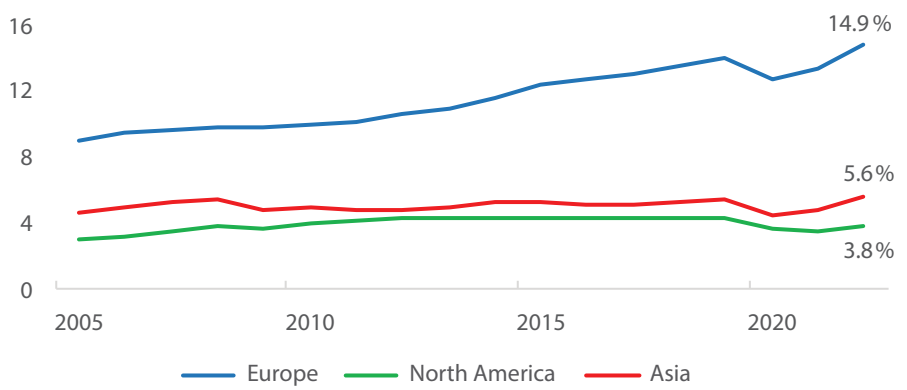


Source: authors' elaboration on ADB MRIO 2011, 2023.

Undeniably, the services sector occupies a distinctive position in the contemporary global economy, particularly within the context of international trade and value chains. In contrast to the realm of commodity production, the potential for enhanced intercountry collaboration in this sector remains substantial. The proportion of services exports to gross domestic product (GDP) remains comparatively low in Asia and North America, while in Europe it has been increasing at a steady rate (see Figure 6 on p. 90). Furthermore, in the aftermath of the global financial crisis, Europe has witnessed a pronounced escalation in the contribution of services exports to gross domestic product,

surpassing pre-crisis levels. Therefore, one can conclude that the notion of slowbalization is likely not applicable to the realm of international trade in services.

Figure 6. Share of services exports in the region's GDP, %.



Source: authors' elaboration on UNCTAD Stat.

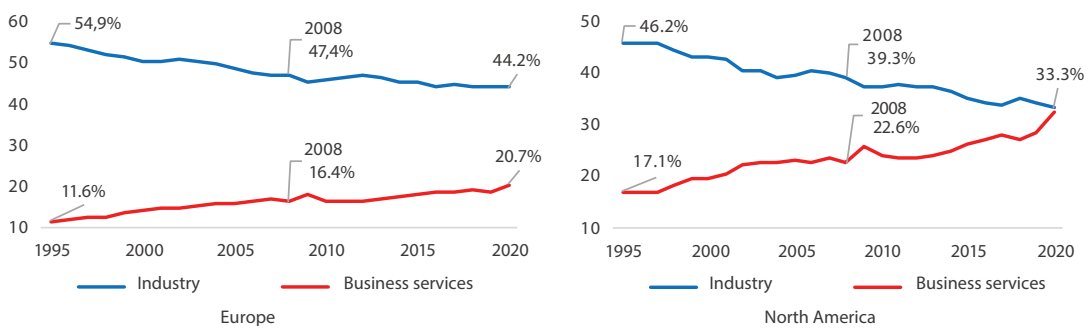
It is noteworthy that the balance of the primary service-supplying countries in the global economy has remained stable over the last two decades, as evidenced by the dynamics of the Herfindahl-Hirschman index (see Figure 7 on p. 90). In the aftermath of the global financial crisis of 2008–2009, the international trade in goods has witnessed a persistently increasing export concentration, signifying the emergence of a select few epicenters of influence that have amassed the predominant share of benefits from foreign trade. Concurrently, the distribution of exporters' shares in services remains constant, suggesting an absence of prominent leaders and evenly balanced distribution of benefits

Figure 7. Herfindahl-Hirschman index of world exports of goods and services by exporting country, 1960–2022

Source: authors' elaboration on UNCTAD Stat.

The strengthening of the intangible sector of the world economy is not only limited by international trade in services. A rising proportion of the value-added of traditional goods is attributable to sectors such as R&D, engineering, and ICT, indicating a "servitization" of commodity exports [Kondrat'ev et al. 2021]. Besides, contemporary high-tech goods comprise a substantial proportion of software, which is furnished to the user along with the goods and subsequently constitutes the value of final products. This phenomenon has been designated "servitification" in the present literature. As demonstrated in Figure 8 (p. 91), there has been a steady convergence of the contributions of industry and intermediate services to the value of exported goods in Europe and North America in recent decades. In the contemporary global economic landscape, approximately 20% of Europe's merchandise exports value added is created in intangible production. For North America, this figure is even higher, reaching 33%, which is nearly commensurate to the value added by manufacturing.

Figure 8. Contribution of regional industry and business services to the value of the region's merchandise exports, %.



Source: authors' elaboration on OECD TiVA data.

Discussion

The results obtained indicate a discernible trend toward slow pace globalization of international trade in goods. According to P. Krugman (2023), the decline in the share of goods in world consumption, concomitant with rising global income, is a contributing factor to the observed slowdown. Baldwin, who posits that trade and economic globalization extend beyond the realm of trade in goods, has embarked on an extramural polemic with Krugman [Baldwin et al. 2024]. According to the aforementioned perspective, the phenomenon of globalization is expected to persist until the potential for arbitrage on inter-country differences in factor costs is completely dissipated. Indeed, inter-country arbitrage in the productive sector has contracted, as evidenced by the decline in interregional FDI flows and the increasing regionalization of commodity flows. Nevertheless, Baldwin identifies the presence of such arbitrage in the services sector, wherein distinct countries offer services at remarkably disparate costs.

It is evident that the growth rates of the share of services exports in world trade and GDP do not demonstrate values comparable to the growth rates of trade in goods during the period of "hyperglobalization." However, the sector of services and their "logistics" has not undergone transformations on a par with those experienced by the manufacturing sector at the turn of the century. As Krugman observes, from 1947 to the present, labor productivity in the service sector has increased by a factor of 2.5 globally, while in the manufacturing sector it has increased by a factor of 5.5. Presently, the preponderance of services is still conducted in person. The infrastructure for the international provision of numerous services remains underdeveloped, and the level of legal restrictions on their provision remains highly prohibitive. However, it is imperative to acknowledge that the realm of trade in services has expanded beyond the conventional transport and travel services. Over the past 15 years, the share of "modern" services, particularly business, telecommunication, and financial services, in world services exports has experienced a substantial increase, reaching approximately 70%. In the realm of business services, which represent the majority of contemporary services, there has been a notable surge in "intermediate" services provided between firms operating across different jurisdictions.

In the contemporary economic landscape, the digital sector has emerged as a significant contributor to the value of finished goods. Since the global financial crisis, the share of intermediate services in world merchandise exports has increased substantially [Blázquez et al. 2023]. At the present stage, trade in such services is more evenly distributed than trade in goods, in which the main flows are concentrated in the triangle "US–Germany–China." The contemporary provision of intermediate services is predominantly facilitated by international platforms, including freelancing platforms (e.g., Upwork, Fiver), international firms engaged in business process outsourcing, and shared service centers.

The utilization of international arbitrage in the services sector appears to be in its nascent stages. The intensification of the global economy, concomitant with the reduction of legal restrictions on international trade in services and the productivity gains in this sector, will precipitate the unfolding of the subsequent wave of globalization. On both fronts, the potential for expanding international trade in intermediate services appears substantial. The OECD's Services Trade Restrictiveness Index remains elevated. Brazil, India, and Kazakhstan have achieved the most substantial liberalization during the period from 2014 to 2023. In contrast, countries in Europe, East Asia, and North America have maintained high barriers to trade in services.[5] According to the OECD, the international liberalization of trade in services has the potential to yield long-term growth of 6–16% in services overall, 20–37% in commercial banking, 7–22% in legal services, 6–20% in accounting, and 5–17% in engineering.

Consequently, the productivity growth in the intermediate services sector is inextricably linked to the transformation of global value chains through Industry 4.0 technologies, which encompass digitalization, automation, and additive manufacturing. Digitalization will standardize low-value logistics and distribution services, while the

[5] OECD. Services Trade Restrictiveness Index. Available at: https://www.oecd.org/en/topics/services-trade-restrictiveness-index.html (accessed 03 December 2024).

production process itself will become more "servitized" and research and development (R&D) and customer data will be top priority. This will add value to R&D, marketing, and after-sales services. The digitalization of manufacturing and the Internet of Things (IoT) will have a significant impact on the configuration of GVCs and the volume of trade in services worldwide. This effect will be manifested in the substitution of labor by production and management robots. The increase in labor productivity resulting from automation is expected to lead to higher value added across all stages of the global value chains. Furthermore, with the integration of digital technologies and AI-driven automation, the field of robotics is anticipated to permeate the high-value business services sector. The integration of additive manufacturing technology, exemplified by 3D printing, will facilitate the implementation of "mass customization" strategies, thereby generating substantial added value at the marketing and after-sales stages. In addition, the advent of 3D printing technology has precipitated a perpetual evolution of novel virtual designs for finished products, which is responsible for augmenting the share of added value derivable from R&D services within GVCs.

In effect, it is the "intermediate" services that may constitute the "core" of a new wave of trade and economic globalization in the near future. The advent of technological advancements in global value chains has precipitated a period of accelerated productivity growth in the services sector. Besides, in recent years, the goal of reducing barriers to international trade in services has become a priority for international development institutions. The contemporary global trade structure in intermediate services that is fairly balanced is anticipated to evolve into a new "triangle" of the predominant suppliers of such services. The new triangle is likely to include those countries that are most successful in integrating Industry 4.0 technologies into global value chains. Furthermore, sectoral progress in the liberalization of international trade in services may also alter the configuration of the aforementioned triangle. Yet, it is challenging to forecast adequately, as two equal but oppositely directed trends are now emerging. On the one hand, there are decoupling processes induced by the repercussions of trade wars, sanctions, and regional isolation of groups of countries. In addition to the protracted trade confrontation between the United States and China that transpired over the past decade, the EU-US contradictions have lately amplified significantly. There is an increasing call in Europe for greater self-sufficiency in the region's economies.[6] The latest development on this front was the announcement by US President D. Trump at the first cabinet meeting of his administration of plans to impose unprecedented 25 percent duties on imports of all goods from the European Union.[7] On the other hand, a number of researchers underscore the trend toward economic convergence of national production systems to be increasingly manifested due to the universal and cross-border nature of modern, primarily digital, production and management technologies [Zagashvili 2022].

[6] Portansky, A., 2025. Mario Draghi once again calls Europe for decisive action. IMEMO RAS Official website. Available at: https://www.imemo.ru/publications/policy-briefs/text/mario-draghi-renews-call-for-decisive-action-in-europe (accessed 23 February 2025).

[7] The White House. Remarks by President Trump before cabinet meeting. February 26, 2025. Access mode: https://www.whitehouse.gov/remarks/2025/02/remarks-by-president-trump-before-cabinet-meeting/ (accessed 27 February 2025).

Conclusion

The analysis conducted in this paper has yielded the following qualitative conclusions.

Firstly, Asia has overtaken Europe as the foremost exporting region, while domestic consumption has emerged as the primary catalyst of its economic growth. Asian countries have also demonstrated a capacity to enhance the efficiency of labor mobilization, thereby fortifying their standing within the global trade arena.

Secondly, the regional component of value chains in Asia and North America underwent augmentation during the period of slowbalization. Conversely, Europe was experiencing a heightened reliance on external intermediate supplies.

Thirdly, following 2009, developing countries, notably China and India, have been integrating into global value chains at an accelerated rate, particularly in intangible production sectors. The GVCs have undergone a notable shift in the post-crisis period, marked by the waning prominence of Japan, once a leading force in the field of competence.

Fourthly and finally, while trade and value chains in the real sector were contracting and slowing down, there was an active expansion of international trade in services. In Europe, the predominance of the services sector is particularly evident. In recent years, trade in services in the world economy has exhibited a more equitable distribution among countries in comparison to trade in goods. A recent analysis has revealed that business and digital services currently comprise approximately one-third of the value added in developed countries' merchandise exports.

In summary, the trajectories of trade and GVCs in the tangible and intangible sectors of the economy present a distinct picture. The thesis of globalization, as it pertains to the real sector, is not applicable to the services sector. The deployment of Industry 4.0 infrastructure is anticipated to enhance the efficacy of information and communication technology (ICT) and telecommunication services within the primary stages of value chains. Concurrently, the trend of technological division—which in recent years has determined the interaction between the West and China, as well as the countries' pursuit of technological sovereignty—will spur on the rebalancing of both inter-country and inter-regional cooperation in most sectors of the non-productive sphere.

Bibliography

Antràs, P., 2020. *De-globalisation? Global value chains in the post-COVID-19 age* (No. w28115). National Bureau of Economic Research. Available at: https://www.nber.org/system/files/working_papers/w28115/w28115

Asian Development Bank. Regional Input-Output Tables. Available at: https://www.adb.org/what-we-do/data/regional-input-output-tables (accessed 10 October 2024).

Baldwin, R., 2016. *The Great Convergence: Information Technology and The New Globalization*. Harvard University Press.

Baldwin, R., Freeman, R., Theodorakopoulos, A., 2023. *Hidden Exposure: Measuring US Supply Chain Reliance* (No. w31820). National Bureau of Economic Research.

Baldwin, R., Freeman, R., Theodorakopoulos, A., 2024. Deconstructing deglobalization: the future of trade is in intermediate services. *Asian Economic Policy Review*, Vol. 19, No 1. P. 18–37.

Benabed, A., Moncea, M., 2024. Slowbalization: Rising Trends for the Global Economy and Business. *Proceedings of the International Conference on Business Excellence*, Vol. 18, No 1. P. 283–294.

Blázquez, L., Díaz-Mora, C., González-Díaz, B., 2023. Slowbalisation or a "New" type of GVC participation? The role of digital services. *Journal of Industrial and Business Economics*, Vol. 50, No 1. P. 121–147.

Borin, A., Mancini, M., Taglioni, D., 2021. *Economic Consequences of Trade and Global Value Chain Integration: A Measurement Perspective*. Policy Research Working Paper; No. 9785. Washington, DC: World Bank. Available at: http://documents.worldbank.org/curated/en/476361632831927312/Economic-Consequences-of-Trade-and-Global-Value-Chain-Integration-A-Measurement-Perspective

Brakman, S., van Marrewijk, C., 2022. Tasks, occupations and slowbalisation: on the limits of fragmentation. *Cambridge Journal of Regions, Economy and Society*, Vol. 15, Issue 2. P. 407–436.

Capello, R., Cerisola, S., 2023. Regional reindustrialization patterns and productivity growth in Europe. *Regional Studies*, Vol. 57, Issue 1. P. 1–12.

Coveri, A., Zanfei, A., 2023. The virtues and limits of specialization in global value chains: analysis and policy implications. *Journal of Industrial and Business Economics*, Vol. 50, Issue 1. P. 73–90.

Giovannetti, G., Marvasi, E., Ricchiuti, G., 2023. The future of global value chains and International trade: an EU perspective. *Italian Economic Journal*, Vol. 9, No 3. P. 851—867. Available at: https://doi.org/10.1007/s40797-023-00252-4

Gopinath, G., Gourinchas, P. O., Presbitero, A. F., Topalova, P., 2024. Changing global linkages: A new Cold War? *IMF Working Papers,* Issue 076.

Hummels, D., Ishii, J., Yi, K.-M., 2001. The nature and growth of vertical specialization in world trade. *Journal of International Economics. Elsevier,* Vol. 54, Issue 1, June. P. 75–96.

Kholopov, A., 2022. Global Imbalances: Evolution of Approaches. *World Economy and International Relations,* Vol. 66, No 9. P. 19–28. Available at: https://doi.org/10.20542/0131-2227-2022-66-9-19-28 (in Russian).

Kondrat'ev V., Kedrova G., Popov V. Servitization of Industry: New Evidence. *World Economy and International Relations,* 2021, Vol. 65, No 8. P. 22–30. Available at: https://doi.org/10.20542/0131-2227-2021-65-8-22-30 (in Russian).

Kononenko, V. et al., 2020. Slowing down or changing track? Understanding the dynamics of "Slowbalisation". European Parliamentary Research Service.

Krugman, P., 2023. Technology and Globalization in the Very Long Run. *Stone Center on Socio-Economic Inequality. Working Paper Series*, No. 63.

Linsi, L., 2021. Speeding up "slowbalization": The political economy of global production before and after COVID-19. *Global Perspectives*, Vol. 2, No 1.

Maltsev, A.A., 2024. "Regionalization" of Global Value Chains: Off-Shoring or Re-Shoring? *Russian Foreign Economic Journal*, No 4. P. 7–25 (in Russian).

Marvasi, E., 2023. Global Value Chain resilience and reshoring during Covid-19: Challenges in a post-Covid world. In: *Inequality, Geography and Global Value Chains*. Cham: Springer International Publishing. P. 231–262.

OECD Data Explorer. Trade in Value Added. Available at: https://www.oecd.org/en/topics/sub-issues/trade-in-value-added.html (accessed 16 November 2024).

Our world in data. Historical price of computer memory and storage. Available at: https://ourworldindata.org/grapher/historical-cost-of-computer-memory-and-storage (accessed 23 November 2024).

Roudometof, V., 2024. How should we think about globalization in a post-globalization era? *Dialogues in Sociology* [Online first].

Stephenson, S., 2013. *Global Value Chains: The New Reality of International Trade*. Geneva: ICTSD & WEF.

Thakur-Weigold, B., Miroudot, S., 2024. Supply chain myths in the resilience and deglobalization narrative: consequences for policy. *Journal of International Business Policy*, Vol. 7, No 1. P. 99–111.

The Conference Board. The Conference Board International Labor Comparisons. Available at: https://www.conference-board.org/ilcprogram/index.cfm (accessed 20 December 2024).

Torrens, R., 1821. *An Essay on the Production of Wealth: With an Appendix, in which the Principles of Political Economy Are Applied to the Actual Circumstances of this Country*. Longman, Hurst, Rees, Orme, and Brown.

UNCTAD Stat. Merchandise Trade Matrix, Annual. Available at: https://unctadstat.unctad.org/datacentre/dataviewer/US.TradeMatrix (accessed 02 November 2024).

UNCTAD. Review of Maritime Transport 2021. Available at: https://unctad.org/system/files/official-document/rmt2021_en_0.pdf (accessed 15 December 2023).

Varnavskii, V., 2024. Global Trade: Long-Term Trends and Structural Changes. *World Economy and International Relations*, Vol. 68, No 1. P. 5–18. Available at: https://doi.org/10.20542/0131-2227-2024-68-1-5-18 (in Russian).

World Development Indicators. Available at: https://databank.worldbank.org/reports.aspx?source=2&Topic=14# (accessed 04 November 2024).

Zagashvili, V., 2022. Economic Globalization and Regional Integration in the Post-Covid Era. *World Economy and International Relations,* Vol. 66, No 4. P. 5–13. Available at: https://doi.org/10.20542/0131-2227-2022-66-4-5-13 (in Russian).

Analyzing and Assessing Armenia's Critical Imports through the Lens of Food Security

Mariam Voskanyan, Viktoriya Hayrapetyan

Mariam Voskanyan — doctor of economics, associate professor and head of department at Russian-Armenian University (Yerevan, Armenia).

ORCID: 0000-0002-5417-6648

Viktoriya Hayrapetyan – associate professor at Russian-Armenian University (Yerevan, Armenia).

ORCID: 0009-0001-7371-5643

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Abstract

With the development of the modern global economy and the uncertainty that increases every year, the issues of national security in general and food security in particular are coming to the fore in many countries. Food security is directly related to imports and their cost in terms of food products. Developing economies are more vulnerable in this respect than developed economies. The article aims to assess the food security of Armenia in the context of the structure of critical food imports and ways to reduce them. The analysis shows that Armenia is highly dependent on food imports, which reduces the level of its food security and negatively affects the overall economic security of the country.

The country needs to revise its policy on ensuring the food security of Armenia in the medium and long term.

1. Introduction: Problem statement

The issue of food security is frequently examined in conjunction with critical imports, defined as goods that are indispensable to the functioning of any economy. Furthermore, given the current stage of global economic development, it is impossible for small open economies to exist without a significant share of imported goods in domestic markets. In the context of the intensely competitive global commodity markets, the capacity of producers from small open economies to compete on price is invariably constrained by their inability to capitalize on economies of scale. A substantial body of empirical evidence, as well as the practices of these countries, indicates that most middle- and low-income countries currently import food [Valdés and Foster 2012; Stuckler et al. 2012; Andrew et al. 2022].

This phenomenon is primarily attributable to the preeminence of transnational corporations within global commodity markets, encompassing food markets [Stuckler and Nestle 2012; Allen 2020; Plahe et al. 2013]. This predominance is largely attributable to the processes of trade liberalization and the repudiation of protectionism at the level of national economies [Kearney 2010; Friel, Hattersley et al. 2013; Friel, Labonte et al. 2013].

A multitude of factors have contributed to the deterioration of food security in numerous countries worldwide. These factors include, but are not limited to, the decline in economic production in the face of a rapidly expanding service sector, intense competition in global markets, and a decrease in the agricultural sector's contribution to the GDP structure across most nations, as well as others [Thaman 1982; Hughes and Lawrence 2005; Thow and Snowdon 2010; Farrell et al. 2019]. The issue is particularly pronounced in developing economies, which currently function as the primary importers of food within the global economy [Valdés and Foster 2012].

The concepts of economic and food security are inextricably linked to the notion of domestic production capacity, particularly in terms of its role in ensuring a sufficient and reliable food supply. However, in a highly turbulent global economy, issues related to survival in the face of uncertainty are becoming increasingly salient, which can include the task of ensuring food security. For a small open economy, the complete realization of this task is unattainable. Nevertheless, policies aimed at enhancing food security should indubitably be accorded a high priority by any small open economy. In particular, import substitution policies for food security-critical goods may be one means to achieve this objective [Nassir 2019; Sedova, Ananiev, and Ananieva 2018]. For the nation of Armenia, this phenomenon is of the utmost relevance, thus serving as the primary factor in determining the subject of our study.

A substantial body of research has been dedicated to the subject of food security in the context of the development of the agro-industrial sector in the economy. This research has primarily been from the perspective of import substitution, including in the post-Soviet space. In particular, Altukhov, Drokin, and Zhuravlyov [Altukhov, Drokin, and Zhuravlyov 2015] place significant emphasis on a strategy of agricultural development for the purpose of import substitution of food products. In a similar vein, the problem of food security has been examined by Primo Braga [Primo Braga 2006] and Zobov et al. [Zobov et al. 2017]. A considerable body of research has examined this issue from the

vantage point of augmenting the domestic consumption of domestic goods [Annunziata & Vecchio 2013; Cardozo, Barreiro, and Huenchuñir 2008; Langrell et al. 2015].

The issue of ensuring food security in the context of reliance on imported food products merits a dedicated study, which was conducted within the scope of this article using the Republic of Armenia (RA) as a case study.

2. Food security in Armenia

Ensuring food security constitutes a pivotal element of a nation's economic security. Food security policy constitutes a series of legal, organizational, logistical, and other measures designed to ensure the necessary quality and sufficient quantity of food products that are safe for human consumption and accessible to all members of society, including the most vulnerable segments of the population. These measures ensure that food is available to consumers at any time and in any situation, including during emergencies and periods of martial law. The country's food security is ensured primarily through the development of agriculture, food production, and food import systems.

Food security implies that the population has physical and economic access at all times to sufficient, safe food of good quality needed for an active healthy life.[1] According to the Committee on World Food Security (CFS) Reform Document, the pillars of food security are:

- Availability (of food),
- Access,
- Utilization,
- Stability.[2]

In the conditions of modern trends in the global economy, food security in Armenia comes to the forefront. In order to ensure the food security system in the country, a number of normative legal acts have been adopted. Among these, we can single out:

- RA Law "On Ensuring Food Security,"
- "National Security Strategy of the Republic of Armenia,"
- "The Concept of Ensuring Food Security of the Republic of Armenia,"
- "Strategy for Sustainable Rural and Agricultural Development of the Republic of Armenia for 2010–2020,"
- "Program of measures arising from the Concept of Food Security of the Republic of Armenia for 2017–2021" approved by the protocol decision of the Government of the Republic of Armenia No. 48 of December 1, 2016, etc.

The primary indicator of a nation's food security is its level of food self-sufficiency.

An analysis of the national food balance data of the Republic of Armenia reveals that, in terms of energy value, the level of self-sufficiency in vital foodstuffs averaged

[1] Rome Declaration on World Food Security and the Plan of Actions in Reference to the World Meeting on the Highest Level Concerned with Food Problems. Available at: https://www.fao.org/3/w3613e/w3613e00.htm

[2] UNO Food and Agriculture Organization. Available at: http://www.fao.org/about/ru

approximately 50.5% in the 2022–2023 period, according to the data. Armenia has a relatively high level of self-sufficiency in potatoes, vegetable crops, fruits, grapes, mutton and goat meat, eggs, and fish. The level of self-sufficiency in beef and pork, milk and dairy products is above average. However, as illustrated in Table 1 on p. 100, the degree of self-sufficiency is minimal for wheat, leguminous crops, vegetable oil, and poultry meat.

A cursory examination of the dynamics data on essential goods reveals disconcerting findings. For a considerable number of goods, there is not only a low indicator, but also a downward trend. Consequently, the level of self-sufficiency in wheat decreased from 33.2% in 2017 to 27.9% in 2023. A similar downward trend is evident in grain legumes, with a decline from 49.7% in 2017 to 35.2% in 2023. This decline is also observed in vegetable oil, where the level of self-sufficiency reached 0% in 2023. Sugar also demonstrates a downward trend, with a decrease from 65.2% in 2017 to 42.8% in 2023. Finally, pork shows a decline from 58% to 48% in 2023. In addition to these commodities, the self-sufficiency level for chicken is also low, amounting to only 25.4% as of 2023.

Table 1. Level of self-sufficiency in essential foodstuffs, %

	2017	2018	2019	2020	2021	2022	2023
Wheat	33.2	31.5	30.7	24.4	23.2	24.4	27.9
Potatoes	102.6	102.6	101.1	101.0	101.7	98.4	99.2
Vegetables, melons	102.5	104.7	104	103.9	105.6	102	97.4
Fruit	109.7	108.9	100.5	98.2	114.4	102	103.1
Leguminous crops	49.7	38.6	38.2	37.3	37.3	26	35.2
Vegetable oil	4.3	2.2	1.5	0.9	0.6	0.1	0
Sugar	65.2	68.6	73	38	33.9	91.2	42.8
Egg	98.2	99.5	100	100.3	98.8	99.2	98.8
Milk	91.2	86.8	84.3	82	87.7	83.4	80.2
Beef	91.5	89.2	90.4	87.3	92.2	89.9	90.7
Pork	58	53.3	55.5	45.1	53.3	47.3	48
Lamb and goat meat	138.9	128.6	113.8	100.4	100.4	100.4	106.1
Chicken	22.5	26.6	21.7	23.9	26.7	22.3	25.4
Fish	101.8	109	113.1	143.7	144.7	148	136.8

Source: database of the Statistical Committee of the Republic of Armenia, https://armstat.am/ru/

In international practice, the state of food security of countries is assessed by the global food security index, which consists of three components: availability, accessibility, quality and safety of food, each of which, in turn, is formed by several factors. As of 2022, Armenia's global food security index[3] was 5.31 (with the maximum among all countries at 7.90), including 6.0 for food availability, 4.49 for accessibility, and 4.42 for quality and safety.

[3] https://analytics.dkv.global/Global_Food_Security_Report_Q2_2022/Analytical_Study.pdf

The food security of a nation is contingent upon the degree to which its economic development ensures the physical and economic availability of food products that meet the health standards of the population and are of a satisfactory quality and safety. To ensure food availability, the primary strategic directives for food security are as follows:

- Increase expenditures on food in total expenditures,
- Increase gross domestic product per capita,
- Regulate tariffs on imports of agricultural products,
- Reduce poverty,
- Ensure food availability and the provision of nutritious food for various segments of the population.

In order to ensure access to food, the following strategic directions for food security should be considered: the availability of sufficient food reserves and a state reserve of vital foodstuffs; the prevention of possible food crises in emergency situations; balanced territorial development; the availability of necessary infrastructure for the normal functioning of the food value chain; the production, storage, and marketing of foodstuffs; and the reduction of losses.

In order to ensure the quality and safety of food products, the following strategic directions for food security should be considered:

- The establishment of standards for agricultural products,
- The implementation of standards and systems for the quality and safety of food products,
- The monitoring and control of their provision,
- The enhancement of phytosanitary and veterinary-sanitary conditions,
- The formulation of a national nutrition strategy aimed at diversifying the food products used and the provision of proteins, vitamins and trace elements through food.

The directions enumerated in the food security strategy of the Republic of Armenia have the potential to be incorporated into the aforementioned strategy and the list of measures to ensure food security of the Republic of Armenia, which is currently being developed by the Ministry of Economy of Armenia.

3. Criteria for determining critical imports from a food security perspective

In the context of contemporary geopolitical instability, both regionally and globally, the issue of determining critical groups of goods is becoming increasingly relevant. This is due to the strengthening and expansion of sanctions on the supply of goods and services by various countries.

The economic factors underpinning this phenomenon have been extensively examined in contemporary literature. In the work "Pillars of Economic Security," R. Ossa [Ossa 2023] asserts that governments must devise strategies to mitigate the reliance of nations on external shocks, which manifest as disruptions to global

supply chains. The author posits that 19% of global exports are classified as bottleneck products, characterized by their provision by a select group of exporters despite their substantial market share. The proportion of such products has increased twofold over the past two decades, indicating that global supply chains have become less diversified over time. According to Ossa, the decline in supply diversification indicates that significant sunk costs are associated with the formation of global value chains. Enterprises face considerable challenges in identifying suitable foreign suppliers, coordinating production processes, and establishing trusting relationships, which forces them to rationalize their global sourcing strategies. Upon thorough examination of the macroeconomic aspects, it is evident that the phenomenon of specialization at the country level is a natural outcome of the forces of comparative advantage. This phenomenon is widely regarded as a primary source of the benefits that are associated with trade. Trade is advantageous precisely because it facilitates access to essential products for which domestic substitutes are challenging to procure. Ossa's calculations indicate that the top 10% of critical products are responsible for 90% of the benefits derived from trade.

Identifying groups of goods that are critical to a country's economic development has become a major policy imperative for many states in recent years. According to the UK government's Department for Business and Trade report,[4] presented in January 2024, critical imports should be understood as the importation of goods that are critical to the security and socio-economic development of the country. Firstly, it is important to note that these goods are indispensable for the functioning of specific sectors of critical national infrastructure, including but not limited to transportation and energy. Moreover, these goods serve as the foundation for safeguarding national economic security. The authors of the report delineate critical goods as goods for which there is a high probability of moderate or catastrophic harm if their supply is interrupted. Such goods are deemed critical in the following areas:

- basic services,
- the livelihood of the population, including food, medicines, and the provision of medical care to patients,
- the economy (strategic sector of the economy or the economy as a whole, including those sectors that are of key importance),
- national security, including the functioning of the state and the maintenance of public order.

In 2022, the Japanese government established a set of guidelines with the objective of identifying goods of strategic importance. The manufacturers of these goods will receive government support as part of an economic security initiative. The initiative is designed to protect the supply chains of semiconductors, medical products, and other key

[4] Critical Imports and Supply Chains Strategy. January 2024. UK Government, Department for Business and Trade. Available at: https://assets.publishing.service.gov.uk/media/65a6a1c1867cd800135ae971/critical-imports-and-supply-chains-strategy.pdf (accessed 28 April 2024).

goods.[5] In May of that same year, Japan enacted an economic security law that delineated the government's measures to ensure the availability of critical goods. The guidelines delineated the criteria for the designation of critical goods or technologies. These goods or technologies are defined as those that are indispensable for human survival, exhibit a present reliance on external supplies, and are susceptible to supply disruptions. Consequently, measures must be implemented to ensure the stability of these supplies. These goods encompassed food, semiconductors, medical products, and rare earth metals, among others. For instance, Taiwan accounts for 90% of global production of chips utilized in smartphones, while China supplies 60% of rare earth metals used by Japan. This dynamic leaves critical components of multiple technologies vulnerable to geopolitical risks.

In the United States, as part of the President's program,[6] aimed at reducing costs for American families, some 30 new measures have been announced to strengthen supply chains critical to US economic and national security. These measures are aimed at ensuring a stable supply of critical goods in industry, agriculture (food), etc.

Much attention in many countries is being paid to the supply of critical minerals, which provide the basis for countries' industrial development. Global economic and technological changes are leading to a long-term increase in demand for critical minerals. According to the International Trade Center,[7] between Q4 2019 and Q2 2023, exports of critical minerals increased by 46%, while global trade volumes of all products increased by 20% during this period. Increases in critical minerals exports were seen in all regions of the world: Asia (+63%), Europe (+40%), Pacific (+42%), Americas (+38%), and Africa (+36%).

The issues of ensuring the stability of supply of critical goods, especially food, are relevant for both developed and developing countries [Dou Shiquan, Xu Deyi 2023; Vivoda, Matthews 2023; Eurostat 2024]. According to the "Doctrine of Food Security of the Russian Federation" (dated January 30, 2010), "to assess the state of food security as a criterion is defined the share of domestic... products and food in the total volume of commodity resources... having threshold values in respect of: grain—not less than 95%; sugar—not less than 80%; vegetable oil—not less than 80%; meat and meat products (in terms of meat)—not less than 85%; milk and milk products (in terms of milk)—not less than 90%; fish products—not less than 80%; potatoes—not less than 95%; food salt—not less than 85%."

Critical goods can thus be defined as goods,

- that are not produced in a particular country or are produced in quantities insufficient to meet domestic demand for them,
- violation or cessation of supplies of which will have a serious (catastrophic) impact on the economic and, in general, national security of the country.

[5] Japan sets guidelines for protecting critical supply chains. Available at: https://asia.nikkei.com/Spotlight/Supply-Chain/Japan-sets-guidelines-for-protecting-critical-supply-chains (accessed 28 April 2024).

[6] FACT SHEET: President Biden Announces New Actions to Strengthen America's Supply Chains, Lower Costs for Families, and Secure Key Sectors. Access mode: https://www.whitehouse.gov/briefing-room/statements-releases/2023/11/27/fact-sheet-president-biden-announces-new-actions-to-strengthen-americas-supply-chains-lower-costs-for-families-and-secure-key-sectors/ (accessed 28 April 2024).

[7] Trade in Critical Minerals. Available at: https://tradebriefs.intracen.org/2023/9/spotlight (accessed 28 April 2024).

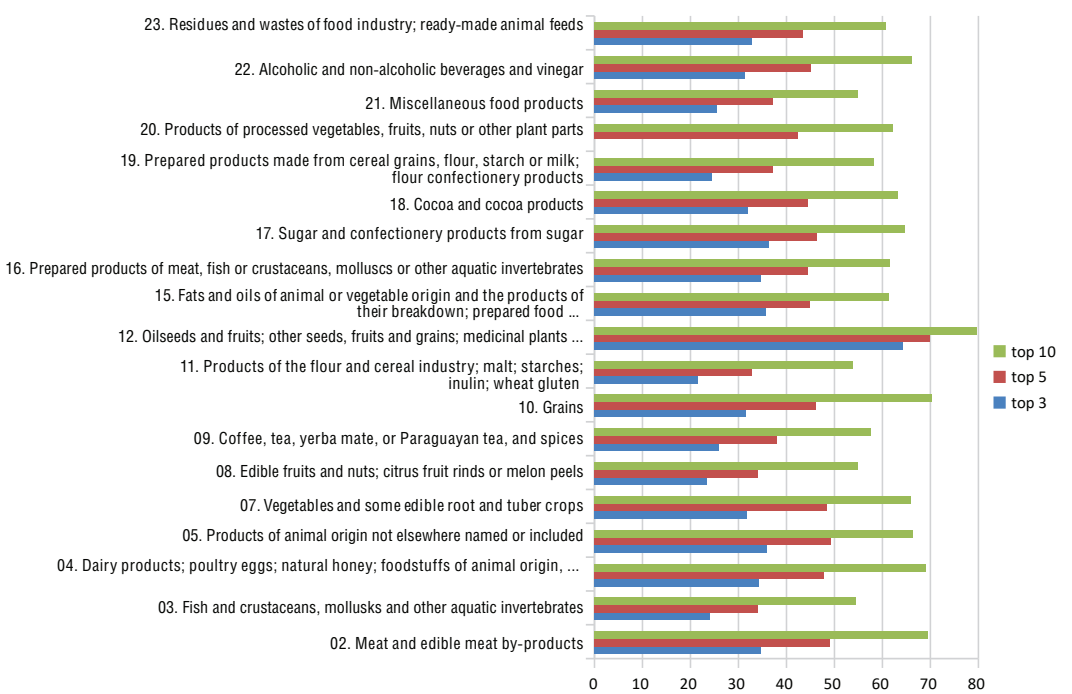
The main groups of critical goods should include, first of all, food, medicines, goods necessary for the functioning of industry (semiconductors, critical minerals, rare earth metals, etc.).

The analysis of the geographical structure of world exports of the main groups of food products (see Figure 1 on p. 104) confirms the relevance of Ossa's conclusions. The groups of goods with the most pronounced "bottleneck" effect in 2023 are:

- 12. oilseeds and fruits; other seeds, fruits and grains; medicinal plants...—the top three exporting countries accounted for 64% of world exports;
- 10. Cereals—five leading countries supplied 46% of the world market, ten countries supplied 70%;
- 02. Meat and edible meat by-products and 04. Dairy products; poultry eggs; natural honey; foodstuffs of animal origin...—the top 10 countries account for 69% of world exports for each commodity group.

In total, of the 19 commodity groups classified as food products under the Harmonized System, ten countries account for more than 60 percent of the world's supply in 13 groups. The above data are an additional fact that makes it necessary to classify food as a critical commodity.

Figure 1. Food exports in the world market according to the Harmonized System,[8] groups of leading countries: top-3 (in world exports), top-5 and top-10, % of world exports, 2023.



Source: International Trade Center database.

[8] What is the Harmonized System (HS)? Available at: https://www.wcoomd.org/en/topics/nomenclature/overview.aspx (accessed 7 March 2024).

Ensuring uninterrupted imports of critical goods is one of the components of a country's economic and, in general, national security. There is no single categorization of critical goods in the modern literature applicable to analyzing the resilience of economies of different countries to disruptions in global supply chains, as each country at the state level forms key parameters and indicators of economic security depending on the challenges it faces and the prevailing conditions of its participation in international and regional economic and political processes. At the same time, food commodities are always considered as critical.

4. Armenia's critical imports in terms of food security

In order to identify critical food products and assess their availability in the Armenian market, the commodity and geographical structures of the foreign trade balance and imports of the Republic of Armenia will be analyzed within the framework of this study in accordance with the above-mentioned criteria in order to study the dynamics of supplies to the domestic market of the Republic of Armenia and identify commodity groups,

- for which there is a negative foreign trade balance,
- that are ever-present in RA imports,
- which are characterized by a high level of supplier concentration (Herfindahl Index),
- for which the Import Penetration Index has maximum values.

To assess the level of import concentration, the Herfindahl Index is used, which is calculated as the sum of squares of the share of each country supplying a particular commodity to the selected market. The Herfindahl Index can take values from 0 to 1. Values close to 0 indicate a high degree of supplier diversification, while values close to 1 indicate a high degree of concentration (up to a single monopoly supplier). The International Trade Center estimates that Herfindahl indices between 0.1 and 0.18 are moderately concentrated, while indices above 0.18 are concentrated.

A high level of concentration of supplies of these commodity groups should be noted (see Table 2 on p. 106). The Herfindahl Index for supplies of individual goods to Armenia in 2023 was as follows:

- for cereals: 0.84; the main supplier is the Russian Federation (93% of all supplies for the group);
- for vegetable oil: 0.98%; the main supplier is the Russian Federation (98%);
- for dried beans: 0.57; the main supplier is the Russian Federation (74%);
- for pork: 0.56; the main supplier is Brazil (70%);
- for poultry meat: 0.22; the main suppliers are Russia, Ukraine, Brazil, and United States.

Table 2. Concentration level of food imports (Herfindahl Index), RA, 2023

Product group		Herfindahl Index
'02	Meat and edible meat by-products	0.2
'03	Fish and crustaceans, mollusks and other aquatic invertebrates	0.15
'04	Dairy products; poultry eggs; natural honey; foodstuffs of animal origin...	0.14
'05	Products of animal origin not elsewhere named or included	0.4
'06	Living trees and other plants; bulbs, roots, and other similar parts of plants...	0.2
'07	Vegetables and some edible root and tuber crops	0.29
'08	Edible fruits and nuts; citrus fruit rinds or melon peels	0.14
'09	Coffee, tea, yerba mate, or Paraguayan tea, and spices	0.3
'10	Grains	0.84
'11	Products of the flour and cereal industry; malt; starches; inulin; wheat gluten	0.78
'12	Oilseeds and fruits; other seeds, fruits and grains; medicinal plants...	0.14
'15	Fats and oils of animal or vegetable origin and the products of their breakdown...	0.6
'16	Prepared products of meat, fish or crustaceans, molluscs or other aquatic invertebrates	0.34
'17	Sugar and confectionery products from sugar	0.34
'18	Cocoa and cocoa products	0.24
'19	Prepared products made from cereal grains, flour, starch or milk; flour confectionery products	0.26
'20	Products of processed vegetables, fruits, nuts or other plant parts	0.16
'21	Miscellaneous food products	0.22
'22	Alcoholic and non-alcoholic beverages and vinegar	0.18
'23	Residues and wastes of food industry; ready-made animal feed	0.13

Source: International Trade Center database.

Among the supplies of processed food products with a high level of concentration of import supplies to the Armenian market, the commodity groups that should be singled out are:

- 11. Products of the flour-milling industry; malt; starches; inulin; wheat gluten: the main supplier is the Russian Federation (78% of total imports for the group);
- 05. Products of animal origin not elsewhere named or included (subgroup 0505). Pelts and other parts of birds with feathers or down, feathers and parts of feathers (with trimmed or untrimmed edges) (Herfindahl Index is 0.89): main supplier is Italy;
- 17. Sugar and sugar confectionery: the main suppliers are Russia (51%) and Brazil (28%);
- 16. Prepared products from meat, fish or crustaceans, mollusks or other aquatic invertebrates: the main suppliers are Russia (52%) and Canada (24%);
- 09. Coffee, tea, yerba mate, or Paraguayan tea, and spices: major supplier is Indonesia (53%).

Table 3 (p. 107) shows the volumes of production and foreign trade in food products of the RA food industry.

Table 3. Production and foreign trade in food industry products, RA, mln USD

Code	Product Name	2022				2023			
		Balance	**Exports**	**Import**	**Production**	**Balance**	**Exports**	**Import**	**Production**
Food consumer goods		**-381**	**857**	**1238**	**2137**	**-412**	**715**	**1127**	**2349**
Foodstuffs		**-671.9**	**496.8**	**1168.7**	**1630**	**-701**	**338**	**1039**	**1787**
02	Meat and edible meat by-products	-102.8	1.8	104.6		-102	6	108	
03	Fish and crustaceans, mollusks and other aquatic invertebrates	98.0	119.4	21.3		37	54	17	
04	Dairy products; poultry eggs; natural honey; food products of animal origin	-82.0	32.7	114.6		-70	24	94	
05	Animal products not elsewhere named....	-11.7	0.2	11.9		-13	1	15	
07	Vegetables and some edible root and tuber crops	30.4	71.8	41.4		18	50	32	
08	Edible fruits and nuts; citrus fruit rinds or melon peels	-38.4	62.5	100.9		-48	49	97	
09	Coffee, tea, yerba mate, spices	-28.3	23.6	51.9		-35	22	57	
10	Grains	-148.5	0.7	149.3		-91	0	91	
11	Flour and poultry products; malt; starches; inulin	-23.9	0.3	24.2		-18	1	19	
12	Oilseeds and fruits; other seeds, fruits and grains; medicinal plants	-17.4	3.6	21.0		-18	3	21	
15	Fats and oils of animal or vegetable origin and their breakdown products	-98.0	7.5	105.6		-65	2	66	
16	Prepared products made from meat, fish or crustaceans, mollusks or others	-10.2	11.0	21.2		-8	10	18	
17	Sugar and confectionery products from sugar	-60.5	2.5	63.1		-62	2	64	
18	Cocoa and cocoa products	-47.2	22.9	70.2		-51	21	71	
19	Prepared products made from cereal grains, flour, starch or milk; flour confectionery products	-55.7	5.7	61.4		-60	5	64	
20	Products of processed vegetables, fruits, nuts or other plant parts	37.9	84.4	46.5		2	55	54	
21	Miscellaneous food products	-37.3	20.6	57.9		-47	20	67	
23	Residues and wastes of food processing industry; ready-made animal feed	-76.1	25.6	101.7		-70	14	84	
Beverages		**291.2**	**360.0**	**68.8**	**507**	**289**	**377**	**88**	**562**
22	Alcoholic and non-alcoholic beverages and vinegar	291.2	360.0	68.8		289	377	88	

Source: databases of the International Trade Center, Statistical Committee of the Republic of Armenia, Eurasian Economic Commission.

The food industry represents the most successful sector of the Armenian economy. Despite the negative balance of foreign trade in consumer food products, domestic production in 2023 amounted to almost USD 2.4 billion (10% more than in 2022). The domestic production in 2023 amounted to almost USD 2.4 billion (10% more than in 2022). There is also a negative foreign trade balance for food products, but domestic production exceeds imports by 1.7 times. For beverages, Armenia had a positive trade balance, with beverage production in 2023 being more than six times higher than imports.

5. "Criticality" of imports of certain commodity groups for Armenia based on the Import Penetration Index

Import penetration ratio is the most commonly used indicator to assess the extent to which imports supply domestic demand. It is calculated as:

$$Import\_penetration\_index = \frac{Import}{Internal\_demand}$$

Since the magnitude of domestic demand is defined as:

$$Internal\_demand = GDP - Export + Import \quad ,$$

then the calculation of the import penetration index can be presented as a formula:

$$Import\_penetration\_index = \frac{Import}{GDP - Export + Import} \quad .$$

OECD experts note that the values of the Import Penetration Index depend on the size of the economies under consideration: large economies usually have low values, and small economies have high.[9] The import penetration index is also calculated for individual industries/sectors of the economy, in this case, instead of GDP the volume of production by industry/sector is used (see, for example, [Fronczek 2017]).

The index can take values from 0 to 1. Values close to 0 indicate almost complete satisfaction of domestic demand through domestic production, values close to 1 indicate dependence on import supplies of this commodity.

According to the calculations (see Table 4 on p. 109), the Import Penetration Index for food products in the RA for the observed period had the following average values in 2023: 0.41 for food products and 0.32 for beverages. Considering this index in dynamics for 2022–2023, we observe a decrease in the value of the index for food products, which is due to a decrease in imports and simultaneous growth of domestic production in this commodity group.

[9] Import penetration. Available at: https://stats.oecd.org/oecdstat_metadata/ShowMetadata.ashx?Dataset=CSP6&Coords=%5BSUB%5D.%5BIMPPENET%5D&Lang=en

Table 4. Import Penetration Index, RA

Name of product group	2022	2023
consumer food products	0.49	0.41
foodstuffs	0.51	0.42
beverages	0.32	0.32

Source: calculated by the authors on the basis of data from the International Trade Center, Statistical Committee of the Republic of Armenia, Eurasian Economic Commission.

For food products, Armenia has the lowest values of the import penetration index compared to other commodity groups. In general, the Armenian economy is characterized by high values of the import penetration index: from 0.9 and higher. This indicates that the RA economy as a whole depends on imports of almost all commodity groups. Since Armenia is a small economy, such results can be justified by the limited size of the economy, lack of opportunities to use economies of scale, etc.

6. Potential of food supplies to Armenia from EAEU countries

Armenia's participation in the EAEU (since 2015), as well as long and extensive economic relations with the Russian Federation, have led to high rates of cooperation between Armenia and the countries of the Eurasian Economic Union in all areas: from trade and investment to tourism and education. The Russian Federation is the main foreign trade partner of the RA as a whole.

The EAEU countries account for a significant part of food supplies to Armenia, with the share of the Eurasian Economic Union countries exceeding 90% for some commodity groups. For many commodity groups, the share of the Russian Federation in the total supplies to Armenia is high, as it was seen in the previous analysis.

The share of EAEU countries in the import of food products to Armenia in 2023 amounted to 40% (see Table 5 on p. 109), and for some groups the indicator was above 90%: "10. Cereals" and "11. Products of the flour and cereals industry; malt; starches; inulin; wheat gluten." The great role of the EAEU countries can be traced in supplies to Armenia of products of commodity groups "16. Prepared products from meat, fish or crustaceans, mollusks or other aquatic invertebrates" (56%), "17. Sugar and confectionery products from sugar" (52%), etc.

Table 5. Share of EAEU countries in food imports to RA, %, 2023

Product group		%
FOODSTUFFS		**40**
02	Meat and edible meat by-products	32
04	Dairy products; poultry eggs; natural honey; foodstuffs of animal origin...	36
05	Products of animal origin not elsewhere named or included	3

Product group		%
06	Live trees and other plants; bulbs, roots and other similar parts of plants; cuttings	1
08	Edible fruits and nuts; citrus fruit rinds or melon peels	1
09	Coffee, tea, yerba mate, or Paraguayan tea, and spices	7
10	Grains	92
11	Products of the flour and cereal industry; malt; starches; inulin; wheat gluten	91
12	Oilseeds and fruits; other seeds, fruits and grains; medicinal plants	31
13	Natural raw shellac; gums, resins and other plant juices and extracts	1
14	Plant materials for making wicker; other plant products...	3
15	Fats and oils of animal or vegetable origin and the products of their breakdown; prepared food...	77
16	Prepared products of meat, fish or crustaceans, mollusks or other aquatic invertebrates	56
17	Sugar and confectionery products from sugar	52
18	Cocoa and cocoa products	46
19	Prepared products made from cereal grains, flour, starch or milk; flour confectionery products	49
21	Miscellaneous food products	45
23	Residues and wastes of food industry; ready-made animal feed	19

Source: calculated on the basis of International Trade Center data.

Table 5 (p. 109) does not present the commodity group "22. Alcoholic and non-alcoholic beverages and vinegar," as this is the only group among foodstuffs for which Armenia has a positive foreign trade balance not only with other EAEU countries, but also with the world as a whole.

Despite such high rates of participation of EAEU suppliers in Armenia's imports, taking into account the geopolitical situation in the region and the world, supply chain disruptions, it makes sense to assess the possibilities of expanding the supply of food commodity groups to Armenia from the countries of the Eurasian Economic Union.

In order to identify food commodity groups for which the EAEU countries can expand their supplies to the Armenian market, such indicators as the Import Penetration Index and Herfindahl Index were calculated for each commodity group; the volumes of imports to the RA from the EAEU countries and the world as a whole were compared; the export volumes of the EAEU countries and their shares in the world trade were analyzed; the geographical structures of imports to the RA and world imports were considered.

Based on the results of this analysis, the commodity groups for which the EAEU countries can expand their supplies of food products to the Armenian market—in aggregate by USD 343 million—were identified (see Table 6 on p. 111). The supplies of meat products may increase the most—by USD 74 million. The most likely increase in supplies of meat products is USD 74 million, animal feed USD 68 million, dairy products and eggs USD 60 million, cocoa products USD 38 million, sugar and confectionery products USD 30 million, and foodstuffs USD 30 million.

Table 6. Potential for expansion of supplies from EAEU countries to the RA market, 2023, mln USD

	Product group	RA imports		Potential of imports to RA from EAEU
		Total	from the EAEU	
	FOODSTUFFS			343
02	Meat and edible meat by-products	108	34	74
04	Dairy products; poultry eggs; natural honey; foodstuffs of animal origin ...	94	34	60
10	Grains	91	83	8
11	Products of the flour and cereal industry; malt; starches; inulin; wheat gluten	19	17	2
12	Oilseeds and fruits; other seeds, fruits and grains; medicinal plants and plants for...	21	6	15
15	Fats and oils of animal or vegetable origin and the products of their breakdown...	66	51	15
17	Sugar and confectionery products from sugar	64	34	30
18	Cocoa and cocoa products	71	33	38
19	Prepared products made from cereal grains, flour, starch or milk; flour confectionery products	64	31	33
23	Residues and wastes of food industry; ready-made animal feed	84	16	68

Source: compiled and calculated by the authors on the basis of the International Trade Center database.

The analysis of RA foreign trade flows in international and Eurasian directions suggests that there are opportunities to create clusters in the EAEU space with the participation of Armenian producers in the food industry. In this sector, it should be noted that Armenia is highly dependent on imported supplies of processed food products. Taking into account the fact that ensuring food security is one of the main components of the country's economic security, the expansion of domestic production of processed food products in the Republic of Armenia within the framework of cooperation with suppliers from the EAEU countries is one of the possible ways of cooperation.

Conclusions

The research findings offer significant insights that are crucial for formulating effective solutions to address issues related to food security in Armenia.

Ensuring food security in Armenia is a very relevant problem, primarily due to the insufficient production of agricultural products in the domestic market. The second Artsakh war, in particular, resulted in the loss of territories that played a significant role in the production of agricultural products, including grain.

Concurrently, an examination of food imports to Armenia reveals a pronounced concentration in both geographical and commodity terms, which poses a significant threat to the country's food security. On the one hand, Armenia is highly dependent on

imports of nearly all essential food commodities. On the other hand, there is a significant geographical concentration of these imports, which also carries certain risks. Armenia must diversify its trade balance in general, but in terms of food supplies, this problem can be attributed to the sphere of economic security.

In this regard, it appears necessary to develop a strategy to ensure Armenia's economic security, particularly by analyzing and assessing the country's food security, including reducing its dependence on critical imports, as identified in the framework of this study.

Bibliography

Allen, L.N., 2020. Commercial determinants of global health. In: *Handbook of Global Health* / R. Haring et al. (eds.). Cham: Springer. P. 1–37.

Altukhov, A.I., Drokin, V.V., Zhuravlyov, A.S., 2015. Food Security and Import Substitution: Major Strategic Objectives of Contemporary Agricultural Policy. *R-Economy – Elektronic Scientifc Economic Journal*, Vol. 1, Issue 3. P. 487–494.

Andrew, N.L., Allison, E.H., Brewer, T., Connell, J., Eriksson, H., Eurich, J.G., Herrero, M., 2002. Continuity and change in the contemporary Pacific food system. *Global Food Secur*., No 32, Article 100608.

Annunziata, A., Vecchio, R., 2013. Functional Foods Market and Consumer Perspective. *Current Nutrition & Food Science*, Vol. 9, No 4. P. 260–270.

Cardozo, T., Barreiro, E.J., Huenchuñir, P., 2008. Functional foods. Reflexions of a scientist regarding a market in expansion. *Rev SocQuímPerú*, Vol. 74, No 2. P. 138–147.

Dou Shiquan, Xu Deyi, 2023. The security of critical mineral supply chains. *Mineral Economics*, No 36. P. 401–412. Available at: https://doi.org/10.1007/s13563-022-00340-4

Eurostat, 2024. International trade in critical raw materials. Available at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=International_trade_in_critical_raw_materials (accessed 28 April 2024).

Farrell, P., Thow, A.W., Schuster, S., Vizintin, P., Negin, J., 2019. Access to a nutritious diet in Samoa: local insights. *Ecol. Food Nutr*. P. 1–18.

Friel, S., Hattersley, L., Snowdon, W., Thow, A.M., Lobstein, T., Sanders, D., Kelly, B., 2013. Monitoring the impacts of trade agreements on food environments. *Obesity Reviews*, No 14. P. 120-134.

Friel, S., Labonte, R., Sanders, D., 2013. Measuring progress on diet-related NCDs: the need to address the causes of the causes. *Lancet*, Vol. 381, Issue 9870. P. 903–904.

Fronczek, M., 2017. Import penetration rate in view of a new concept of measuring foreign trade. *Argumenta Oeconomica*, No 38. P. 285–297. DOI: 10.15611/aoe.2017.1.11.

Hughes, R.G., Lawrence, M., 2005. Globalisation, food and health in Pacific Island countries. *Asia Pac. J. Clin. Nutr.*, Vol. 14, No 4. P. 298–305.

Kearney, J., 2010. Food consumption trends and drivers. *Phil. Trans. Biol. Sci.*, No 365 (1554). P. 2793–2807.

Langrell, S.R.H., Ciaian, P., Mary, S., Paloma, S.G., 2015. *The role of The Eurasian wheat belt to regional and global food security*. Technical Report by the Joint Research Centre the European Commission's inhouse science service.

Nassir, A.M., 2019. Volunteerism culture among AL-Muthanna University Students: An Anthropological Study. *Opción*, Vol. 35, No 21. P. 401–413.

Ossa, R., 2023. Pillars of Economic Security. Finance & Development. *A Quarterly Publication of the International Monetary Fund*, Vol. 60, No 2.

Plahe, J.K., Hawkes, S., Ponnamperuma, S., 2013. The corporate food regime and food sovereignty in the Pacific Islands. *Contemp. Pac.* P. 309–338.

Primo Braga, C.A., 2006. *Import substitution industrialization in Latin America: Experience and lessons for the future*. Paper presented at the Seminar in honor of Professor Werner Baer, held at the University of Illinois, Urbana-Champaign. 2006. Available at: https://link.springer.com/chapter/10.1057/9780230297388_4 (accessed 15 October 2019).

Sedova, N.V., Ananiev, M.A., Ananieva, O.M., 2018. The effect of Russia's in-progress import substitution strategy on its agri-food security. *Revista Espacios*, Vol. 39, No 45. P. 21.

Stuckler, D., Nestle, M., 2012. Big food, food systems, and global health. *PLoS Med*, Vol. 9, No 6. Article e1001242.

Thaman, R.R., 1982. Deterioration of traditional food systems, increasing malnutrition and food dependency in the Pacific Islands. *Journal of Food and Nutrition*, Vol. 39, No 3. P. 109–121.

Thow, A.M., Garde, A., Winters, L.A., Johnson, E., Mabhala, A., Kingston, P., Barlow, P., 2022. Protecting noncommunicable disease prevention policy in trade and investment agreements. *Bull. World Health Organ.*, Vol. 100, No 4. P. 268.

Valdés, W.F., 2012. *Net Food-Importing Developing Countries: Who They Are, and Policy Options for Global Price Volatility*. ICTSD Programme on Agricultural Trade and Sustainable Development. Geneva: ICTSD. P. 43.

Vivoda, V., Matthews, R., 2023. "Friend-shoring" as a panacea to Western critical mineral supply chain vulnerabilities. *Mineral Economics,* Vol. 37, No 3. Available at: https://doi.org/10.1007/s13563-023-00402-1

Zobov, A.M., Degtereva, E.A., Chernova, V.Yu., Starostin, V.S., Golodova, Zh.G., 2017. Analysis of the Agro Risks of Import Substitution of the Food Production. *Journal of Environmental Management and Tourism*, Vol. 8, No 3. P. 648–656.

A BRICS Intellectual Property Policy: Why It Is Needed, And What It Could Look Like

Alan Freeman

Alan Freeman — research affiliate, University of Manitoba and University of Greenwich.

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1. Introduction

This paper states the case for an independent BRICS Intellectual Property policy. By a "policy," I mean a set of agreements and laws intended to provide for the mutually beneficial exchange, deployment, and use of technological and artistic products between and within nations. By "independent" I mean unconstrained by existing regulations such as those that bind signatories to the World Trade Organization (WTO) or the World Intellectual Property Organization (WIPO). Rather, I argue, a new world IP system is required, which over time should take precedence in the sovereign nations concerned. The emerging BRICS institutions are well-placed to shape such a system and bring it into being.

To avoid misunderstanding, "independent" does not mean "unilateral." This paper seeks to provoke a discussion on principles; decisions on when or how these may be implemented is a matter for the relevant political institutions. A parallel is the dollar-denominated world trading system; in both cases, there is an excellent case for an alternative that benefits all humanity. But the practical steps involved must be worked out between the many nations which, having diverse systems and interests, but recognizing the benefits, can participate in devising and share in implementing.

That said, a different IP system, I argue, is as important and as urgent as a new trading system.

2. Intellectual Property and the unipolar moment

1995 was, arguably, the pivotal year of the "Unipolar Moment." It produced the WTO, incarnating the ideal of a rules-based international trading order overriding the jurisdiction of all purely national states. Participation in it, dubbed the Washington

Consensus, was the cornerstone of US foreign policy until US policymakers recoiled from the consequences of Chinese membership.

It is now clear that this framework was no sooner achieved than it began to dissolve. It is not our purpose to comment on the reasons, because our proposal does not depend on why it came apart; it refers to what should be done afterwards. We focus on one point, less widely grasped than history requires. This is the formation, in parallel with the WTO, of a new organization unenvisaged in 1947: the World International Property Organization (WIPO).

At its inception in 1970, the WIPO was an ineffectual talking shop with only 23 members. In 1995 it was transformed into a powerful multilateral "rules-based" organization with a membership approaching 200, integrated into the WTO framework but operating as an independent body.

The WIPO codified and institutionalized practices that had been taking shape for some time. But unlike the WTO, the successor to the 1947 General Agreement on Tariffs and Trade (GATT), the WIPO did not implement any previously-agreed proposal: it created something new. This new thing, we argue, is as decisive an element of the present world order as the dominance of the dollar.

3. How did the WIPO define intellectual property?

There have been global world markets before—for example at the turn of the century or indeed, though arguably, in the era of the world trading system of the Ottomans. But when history repeats itself, it either brings new elements into being or transforms old ones so much that they become their own opposite. The reconstruction of the world market has brought with it two new developments in property relations: GATs or the General Agreement on Trade in Services, and TRIPS or the Trade-Related Aspect of Intellectual Property, which seek to establish a worldwide market in knowledge.

The WIPO redefined the words "extension of trade" to mean "restraint of trade."[1] The original intention of IP was to diffuse technology and protect creators. The function of the WIPO was to restrict diffusion and protect owners. To this end it imposes the owner's rights on the creators and enforces their ability to prevent others using their technology. It subordinates the inalienable human right to create knowledge to a monopoly on its use.

BRICS should seek an alternative which protects creators, promotes the spread of technology, and provides the income needed to sustain those whose livelihood depends on these activities.

How does the WIPO work? It changed the way in which products with mental content were traded.[2]

- It prescribed a *universal* law which was to apply in all countries regardless of national interests or differences. This deprived nations of the patrimony of their own natural resources, converting their agricultural systems into "products" of pharmaceutical companies, and denied them the right to use

[1] The earliest recognition of this contradiction came from L. von Mises and the Austrian current in economics continues to oppose it on fundamental grounds. See for example [Wisuniewski 2020].

[2] See [Bodrunov 2022a,b,c].

these resources for their own people. It produced the scandalous result, visible during the coronavirus pandemic but evident in the treatment of AIDS, that entire populations were denied access both to generic and imported drugs which "violated" IP. More fundamentally, it deprived nations of the sovereign right to deploy technology in a manner suited to their society, culture, and existing level of development.

- It changed the *timespan* of IP to 70 years, that is, beyond the active lifetime of a typical human. This greatly lengthened the protection provided by patent, which was typically 10–15 years in most countries. It cemented in law the practice, already widespread in the US, of "blocking patents"—their use not to engage in production but to prevent others doing so. In effect it abolished the prevailing principle of "use it or lose it."
- It merged two quite different types of IP, being patent and copyright. Patent was intended to *encourage innovation* by allowing inventors to realize sufficient profit to cover their expenses. Copyright (as its French name *droit d'auteur* tells us) was meant to *provide authors with an income*. The effect was to make creativity a corporate, rather than a personal right, creating the conditions for "slave contracts"[3] obliging artists to sign away their rights to perform as the only way to secure a reliable income.
- It substituted, for the *duty to employ* a new technology, the *right to prevent* its use by others. The prevention of infringement became the principal source of a new industry of litigation. The result was the weaponization of IP, notably by the US in its political struggle with China. The chief accusation of the US in its battles with Huawei, TikTok and others is that China is "stealing" US technology. This is intimately linked with the charge that the national defense interests of the US are threatened if China develops its technology. This enters into fundamental conflict with the preceding, enlightenment principle that access to human knowledge is the right of all humans.

4. Where did the WIPO come from?

The change arose neither from any natural process nor a general consensus that it would lead to mutual benefit. It was the result of a systematic and well-funded campaign by specific US lobbies. Intellectual Property Rights (IPRs) emerged as a central aspect of a general US campaign on trade which Bhagwati (1993) designates as "Aggressive Unilateralism." This centred on section 301 of the Trade and Tariff Act of 1974, a keystone of US trade legislation. It was elaborated in sections 301 to 306 in 1984, and in sections 301 to 310 of the "Omnibus Trade and Competitiveness Act" of 1988. These acts remain in force.

[3] The phrase "slave contract" was coined by George Michael in a dispute with Sony Music Entertainment (UK) Ltd. with whom he had signed a life contract which forbade him to perform any of his own works except as explicitly permitted by Sony. He sued Sony in 1992, but in 1994 the UK High Court found against him, ruling that this type of contract was normal in the entertainment industry. Shortly before his death, Michael recorded a video documentary entitled "Freedom" which covered the issue extensively and can be viewed at https://www.dailymotion.com/video/x6lxlra. See [Coulthard 1995].

Section 301 raised hackles because it provided for the US itself to undertake mandatory action in pursuit of the enforcement of GATT-agreed arrangements, whether or not GATT procedures had been exhausted or indeed, explored. The US thus set itself above the same international legal framework from which it drew justification for its actions and the claims that its partners had trade obligations to it. The "Super 301" and "Special 301" provisions raised this to a new level. Bhagwati (1993) records that

> Super 301 required the US Trade representative to prepare an inventory of foreign trade barriers, establish a priority list of countries and their unreasonable practices, and then set deadlines for their removal by the foreign countries, and, should they fail to comply, for decisions on retaliation by the United States. Special 301 is similar in its time-bound approach but is addressed specifically to intellectual property rights.

He goes on to remark that

> Section 301 is characterized by the (wholly distinct) fact that it enables the United States to unilaterally make demands for trade concessions by others without offering any matching, reciprocal concessions of its own that others might demand in turn.

IPRs fall into three categories: trademark goods (designer and branded products), copyright goods (artistic materials), and patent goods (industrial processes and their products). Copyright law has been significantly extended to include software. Bringing these three categories together signifies, essentially, a generalized alienation of mental products and their transformation into a distinctly marketable entity. A patent, a copyright, or a trademark embodies the right to produce "something" defined not by what it is or contains, but by the knowledge or information that distinguishes it. Software, the most advanced form of IPR, involves hardly any material product at all. What is actually sold is the legal right—or license—to use the software in your own production processes.

IPRs, like GATS, defined trade barriers in terms of the US internal legal regime. The US explicitly sought, and through the WTO achieved, changes in the internal structures of its trading partners and rivals to harmonize their copyright and patent laws with its own, with a view to stamping out what it characterized as "piracy"; the production of copies. It abandoned the existing, bilateral structure for Intellectual Property safeguarded by the United Nations body known as the World International Property Organization (WIPO) precisely because of this need. The WIPO operated on the old GATT principle of non-discrimination; as Maskus (1993. P. 82) delicately explains:

> the prevailing policy principle in WIPO is national treatment, which requires countries not to discriminate between domestic and foreign firms in its IPRs. However, this principle does not prevent the level of protection from being weak if a particular country so desires.

The US sought to ensure that the country's desires would not enter into the matter. Prior to the Uruguay round, India provided a seven-year patent protection for

pharmaceutical production processes and none for pharmaceutical products; as a WTO member it became obliged to extend protection on both to twenty years, which it spelt out in the 2005 amendments to its 1970 Patents Act. It had to do this in order to comply with the TRIPS Agreement (Trade-Related Aspects of Intellectual Property Rights) of the World Trade Organization (WTO), which require member countries to establish a product patent regime for all fields of technology, including pharmaceuticals and chemicals, by January 1, 2005.

In plain English, the legislation makes it illegal for India to cure its sick, while the TRIPS agreement deprives the Indian people of the sovereign right to do anything about it.

This illustrates our principal point: this "extension" of the market demands a restriction of production. The US manufacturers who supported Super 301 were concerned, not to protect the US markets against floods of fake Gucci watches and pirate CDs, but to prevent other countries making these same or comparable products themselves for their own use. In 1989 the US exported $58.8 billion worth of goods sensitive to IPR, being 16.1% of its total exports, whilst Brazil exported $2.0 billion, that is, 0.2% of total US imports, and imported $2.4 billion, that is, 13.1% of its own imports.[4]

5. Why BRICS?

As the above considerations strongly suggest, the outcome of this process has been detrimental. Could it be improved upon? This is where the relevance of BRICS comes to the fore. What we have so far shown is that at the heart of today's world trade system as redefined during the 1995 GATT process lies a concept of intellectual property that was determined not by the general interests of humanity or the shared interests of its nations, but by the private interests of a lobby within one nation—the US—which designed this concept to preserve and strengthen the rights of its dominant high-tech monopolists, caused it to be passed into US law, and thereafter caused it to be institutionalized in the provisions of the WTO.

How can an alternative be arrived at that is genuinely beneficial to all concerned? The principles concerned, I suggest, are quite similar to those of devising a fair and beneficial system for trade and finance that releases the World Majority Nations from the burden of US dollar hegemony. First, how should the principles regulating trade be arrived at? Certainly not by allowing a single nation to dictate them. It needs to be dealt with collaboratively.

Second, to what extent is an organization like WIPO or WTO appropriate for administering what is agreed? As with finance, the basic problem is that national requirements differ, and accommodation has to be made that takes into account the very different national requirements and level of developments of each partner to any agreement that may be reached, within the framework of general overall principles. This is not the same method as that of the WTO which is, in essence, to devise a single law for all and then construct an elaborate arbitration framework—which invariably works to the advantage of the richer nations [Freeman 1998b].

[4] *The UN's International Trade Statistics Yearbook* cited in [Maskus 1993].

Last but not least, any new framework needs to address a great historic inequity that is to a large degree responsible for the very marked differences between nations as regards their national income and development: this inequity consists, in essence, of an entrenched monopoly of high-tech production within what I term [Freeman 2024] the "Columbian Nations," being the alliance of the US, Western Europe, Japan, and the settler colonies that currently dominates the world political economy.

BRICS, as it is shaping up, provides a superior framework for crafting a genuinely multipolar alternative approach to IP. As noted on the BRICS information portal [BRICS 2025] when the UAE announced its decision to join:

> BRICS and the United Arab Emirates share a common goal of creating a more fair and balanced global order in which the economic and political interests of all countries are valued equally alongside those of traditional Western powers. At the heart of this vision lies the idea of moving away from an outdated model of global governance dominated by a few developed nations and towards a multipolar system that places greater emphasis on state sovereignty and equality. The foreign policy stance of BRICS countries is aimed at establishing conditions where not only the major Western economies but also developing nations can participate equally in addressing global issues. This approach is reflected in initiatives such as the New Development Bank and BRICS cooperation mechanisms, which provide developing countries with access to financial resources and alternatives to Western financial institutions.

My argument is quite straightforwardly that devising a new framework for defining and managing intellectual property rights belongs among the questions that BRICS partners should discuss among themselves.

6. Promote and Reward: The alternative to Enclose and Enslave

What principles might govern a new framework for intellectual property?

When the present system was created, in effect it also created a new category of commodity: knowledge itself. The Super 301 lobby, a narrow section even of US society itself—imposed an institution and a set of universal laws on the world, which gave them an extraterrorial right to criminalize the communication and application of knowledge.

Perhaps if the benefits of such a measure could be demonstrated, the methods involved might be excused. However, due consideration to the results suggests this was not the case. It deprived nations of the food sovereignty endowed on them by nature, by converting the genome of this product of generations into the property of a foreign person. It produced unnecessary suffering and death in the AIDS and coronavirus pandemics. It has fostered the weaponization of IP in the US administration's trade war with China. And—perhaps most tellingly—the result is a demonstrable *slowdown* in the productivity growth rate of the technologically advanced nations.[5]

[5] See Freeman, A., 2024. The Geopolitical Economy of International Inequality, Development and Change, https://onlinelibrary.wiley.com/doi/10.1111/dech.12812

These failures are the basis for the argument of this paper that IPRs are not a step forward, even compared to past forms of IP which, however much they could be improved on, at least provided elementary incentives to the innovator and independence for the creator without restricting the diffusion of technology or depriving creators of an income.

And neither are they a step forward compared to what is now possible. New technological developments, notably (but not exclusively) the Open Source, Open Access and Open Innovation systems, demonstrate that there are entirely different, and better, ways to achieve both the original purpose of the patent and copyright systems, and modern goals which were either not definable, or not achievable, in the past. The striking achievements of DeepSeek only serve to underscore the potential benefits of what I argue [Freeman 2025] is essentially a new technology, requiring a new form of property.

To identify and implement a better system it is useful, if not indeed essential, to define its goals. In general, of course, nations should strive for the twin and related goals of advancing the welfare and happiness of their peoples, and acquiring sovereignty over their development. But how do IPRs fit into this?

I suggest defining the primary function of a new system of intellectual ownership as to *Promote and Reward*.

- As regards scientific and technical discoveries, this means encouraging the rapid diffusion and application of these discoveries, in and through a method for rewarding those who play an active part in so doing. Primarily, those to be rewarded are therefore those whom nations can *put knowledge to work*: that is, the producers. The emphasis in this respect is on the "promote" side of the pair, the most problematic difficulty of national development being the application and use of technology in the specific circumstances of the nation.
- A second category, with distinct characteristics, comprises the "creative industries"[6]: all forms of creative activity that enhance human experience, from the more traditional forms of art, music, dance, or theatre to the myriad and growing range of new ICT-based products, be they films, videos, games, apps, or social media. Here, the primary problem is the "reward" side of the pair; as all engaged in this sector testify, the greatest difficulty is to ensure that creators receive an income that maintains not only their livelihood but their capacity to create: to develop their skills, build networks of co-producers, and find their audience.

Promoting and rewarding are two sides of a single coin. If a new discovery or art form is not put to use, the income required to sustain its creators will not come into being. Conversely, if the producers are not enabled to create, neither the discoveries nor the art will come into being.

But looked at from a world perspective, what is clearly required is a system of relations between nations which allows both for specialization and for exchange. No single nation can be at the forefront of all forms and practices of arts and sciences; they can, however, enter into agreed relations with each other that provide for an international system which meets the primary goals.

[6] Bakhshi et al. (2013).

Do IPRs achieve this? The evidence is of two types. First, what IPRs actually do, and second, what has been, is being, and can be achieved without them.

The first defining feature of IPRs is that they transfer all *duties* in the management of knowledge from the humans that produce and use it, to those who can secure a rent from its ownership. This is a form of enclosure, not a form of promotion.

The second defining feature is that they equally transfer all *rights*, to the same degree. The consequence is that the producers have no guaranteed income and no right to a livelihood that allows them to continue functioning as producers. Everything they do, from the income arising from their art or discovery down to the very right to produce it, is subject to the will and decision of those who contract for their services or purchase the rights to them.

This combination, I suggest, should be designated *Enclose and Enslave*.

7. Distributed ownership: The fundamental principle of a pluripolar IP policy

Many proposals for improvement have come forward, not least because of the frustration and destruction arising from the WIPO system. The particular way forward I want to advance is the notion of Distributed Ownership, proposed by Sergey Bodrunov (2018) as part of the general concept of Noönomy.

We begin from the fact noted above, that IPRs transfer the rights and duties of the producers, in their entirety, to the owners. Moreover, they do nothing to correct one of the recognized deficiencies of the patent and copyright system, namely, they do nothing to provide for the rights of the consumer—a broader category than might be thought, since the consumers of technology include entire nations and thereby their states and governments, and operate in practice as a barrier to acquisition by the general public (just think of how expensive it is to buy a book, never mind apply a technology, and the point becomes clear).

That is to say, IPRs create a monopoly of all rights and duties without regard to producers and consumers alike, and transfer it to a corporate personality with no specific or legally defined interest in anything except the revenue stream arising from it.

The traditional alternative to monopoly—owning the single source of a product—is competition, creating many sources of the same product. But whilst this is quite easy to define as regards material products like food, raw materials, machinery, houses, and so on, it is by no means clear what is implied by "sources" of a product that is by its nature freely available. That is because the results of mental production[7] are vastly cheaper to

[7] I term these "mental objects." A wide range of other terms are employed by others, including "knowledge," "information," and not least "culture." I use the term mental object to define any identifiable non-material thing that can exist in a range of material forms, and can be converted from one form to the other without loss of identity. For example, a mathematical theorem can exist as a written text, a spoken presentation, or in the mind of the student, the lecturer, the researcher or the technician; a song can be printed, sung, recorded, broadcast, or memorized: no matter, it is the same song. Not least, language itself is a mental object and the repository of the most ancient treasures that have come down to us from antiquity—be they sagas, sacred texts, learned volumes, discoveries, records, or codified artisan skills. See [Freeman 2020].

reproduce than to *produce*—so much that for many writers, notably Aleksandr Buzgalin and Andrey Kolganov,[8] such products form part of a "Creatosphere" whose elements should be entirely freely available to all.

The difficulty with the above concept is the "reward" side of "Promote and Reward." A system that provides for the use of creative production must provide a livelihood for the producers; it cannot just cater for the users. The IPR legislation has a one-sided but clear answer to this problem; it is that this livelihood should be financed out of profit:

> If an innovation has economic value but is also easily imitated, competing firms would copy and sell it, earning a share of the potential profits. In perfectly competitive markets, enough duplication would emerge to eliminate all profits... Intellectual property rights attempt to correct this problem by providing an exclusive right, or monopoly, to the innovative firm to sell or use the product or technology. Patents, trademarks, copyrights, and other IPRs limit market access to the innovation and raise its price [Maskus 1993. P. 72].

The difficulty here is the obverse of the creatosphere solution, but leads to the same result. The "exclusive right" to sell or use the results of creative labor confer no incentive, and no duty, to provide for that creative labor to exist.

What is poorly understood here is the difference between the monopoly system described above and the wage system. This is characteristic of mental products. Under the wage system, employers are obliged to provide for the livelihood of their employees, whether or not they desire to do so, because they cannot produce without laborers, whom they must find in the market and pay for. The wage system thus perpetuates the class of productive workers.

But the IPR does not perpetuate the class of creators. The owner of an IPR is not compelled to fund those who create his income. He need merely ensure that those who do so, give him a cut. This is an impediment, not an incentive, much less a compulsion, to fund the producers of his income. Just as the feudal landlord stood between the farmers and their laborers, taking a cut which reduced the income of both, so the IPR owner stands between the creative producers and the entrepreneurs who put their work into practical effect.

It is here that the concept of distributed ownership suggests a way forward. The modern juridical meaning of ownership is that all rights and duties reside in a single legal person. In Roman law this was known as *Jus utendi et abutendi*, the "right to use and abuse" and was distinguished from *Jus utendi,* the right to use. Ownership may be overridden, as when the law fines a polluter, but when a dispute goes to a court, there are two parties, the owner and the plaintiff.

This is not the same as when a property is jointly owned. In deciding what a corporation should do with its assets, the matter is settled between the parties—usually by a shareholder vote. But who should "own" knowledge? Who should take part in

[8] It is with great sorrow that I record here my eternal debt to Sasha Buzgalin, whose passing has diminished us all beyond expression. Grinberg, R., Buzgalin, A., 2015. The Old Development Model Has Exhausted Itself. Where Does the World Move? *Russia and the Contemporary World*, 2, pp.30-43.

deciding what is to be done with it? Clearly, its users and its producers. If the users have no hand in the matter, their rights will not be protected. But if the producers have no say, the product will not even be created.

The juridical question as to "how should the law decide how knowledge should be managed" then becomes the following: "what form of legal ownership best guarantees that knowledge is created and used?" Hot on the heels of this comes the question "who should have authority to determine how knowledge should be managed?"

This may appear a pettifogging distinction. But in history, almost all fundamental social changes have arisen when societies reconsider what they will recognize as property, and who had authority over it. What is required is a system that provides for the *joint* ownership of the products of human mental production by its creators and users, which provides for the diffusion of the results, and the livelihood of the creators by providing mechanisms for agreement among the joint owners on how to realize the obvious mutual benefit from achieving both these aims.

Open Source and Open Access: twin future technologies for the management of Knowledge Distributed ownership is not a pipe dream. It is, in practice, driving the key emerging new approaches to the management of knowledge, namely Open Source and Open Access. These are most developed in the software industry technologies but increasingly widespread in other industries, notably publishing.

These developments are not marginal. The internet and the World Wide Web themselves are not the subject of patent but are administered by collective international organizations—as are a plethora of technologies that require standards for cooperative activity, such as electricity transmission, telecommunication, postal systems, or engineering designs. It is the formation of common, open standards that drives technical advance—not their conversion into private property. In the software industry, product after product is provided in two versions: the open source version, which anyone can reproduce, and premium services, which essentially sell not the product itself, but the capability to use it efficiently. Many special licenses such as Creative Commons, the MIT license, and others, provide protection against abuse without restrictions on diffusion—indeed, quite the reverse, since they specify that owners—who are generally speaking the original producers—have the right to *prevent* the privatization of their product.

Without Open Source, the modern computer as we know it would not exist. In a famous legal verdict known as the "ABC" verdict, that launched the IBM PC, it was found that Honeywell—who held a monopoly license on computer production dating back to the pioneering ENIAC computer, and used it to prevent any rivals competing with it—did not have the right to this license, because ENIAC's builders had copied vital information from a physics professor in Iowa who developed the technology years beforehand. But unusually, the judgment did not award the license to anyone else. It simply declared that it was not valid.

The result was that *anybody* could make and sell computers. Nobody had the right to stop them. IBM, recognizing the significance of this decision, specified the standard that became the basic architecture of the modern PC and its descendants such as the cellphone and declared this to be an open standard. Third parties could make and supply anything using this architecture, and IBM would specialize in the areas of production where its

specialist knowledge provided what third parties could not. Over time, the entire PC industry grew out of the open sourcing of this design.

8. IP and national development

The rise of services and the decline of manufacture as the principal source of employment and value production will continue.

A world right in intellectual property can achieve progress if all nations have achieved equal levels of technological development, that is to say, in the productivity of their labor. Most if not all imbalances in trade arise when a nation whose labor is more productive trades with another whose labor is less productive, as a result of the process by which world prices are formed or "terms of trade" [Toye and Toye 2003]. These differences arise from the level of technology, because a more efficient producer has lower costs, and can undersell the less efficient producer whilst realizing a greater profit [Mandel 2024, Amin 2010].

The elimination of such inequalities thus requires that each nation can supply its producers as efficiently from within its economy as from the world market. But the present world system exchanges the advanced industrial products of the developed nations at high prices, against the primary and secondary products of the rest of the world at relatively low prices.

The WIPO enshrined, in institutional form, a series of provisions for world trade that were the subject of intense discussion leading up to the WTO's establishment. It should be recalled that the WTO itself was the outcome of a round of discussions within what, at the time, was known as the General Agreement on Tariffs and Trade, or GATT. Each round of discussion is known by the country in which they were conducted, and the WTO was the fruit of the Uruguay Round of GATT. Thus, despite its impact, the WTO was nothing but the implementation of the Uruguay Round. However, side-by-side with these agreements came a second set, termed the GATS or the General Agreement on Trade in Services. The WIPO was the fruit of GATS.

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Bibliography

Amin, S., 2010. *The Law of Worldwide Value*. New York: Monthly Review Press.

Bakhshi, H., Freeman, A., and Higgs, P., 2013. *A Dynamic Mapping of the Creative Industries in the UK*. Available at: https://www.academia.edu/5538116/A_Dynamic_Mapping_of_the_UKs_Creative_Industries

Bhagwati, J., 1993. Aggressive Unilateralism: An Overview, in Bhagwati, J., and Patrick, H. T. (eds), 1993, *Aggressive Unilateralism*, Ann Arbor: University of Michigan Press; reprinted in King, P., 1995, *International Economics and International Economic Policy*, New York and London: McGraw-Hill.

Bodrunov, S. D., 2022a. Scientific and technological progress and transformation of society: noonomy and noosociety. Part 1. *Noonomy and Noosociety. Almanac of Scientific Works of the S.Y. Witte INID,* 1(1) pp.16-29.

Bodrunov, S. D., 2022b. Scientific and Technological Progress and Transformation of Society: Noonomy and Noosociety. Part 2. Noonomy and Noosociety. *Almanac of Scientific Works of the S.Y. Witte INID*, 1(2), pp.09–26.

Bodrunov, S. D., 2022c. Scientific and Technological Progress and Transformation of Society: Noonomy and Noosociety. Part 3. Noonomy and Noosociety. *Almanac of Scientific Works of the S.Y. Witte INID*, 1(3), pp.9–26.

BRICS 2025, *This New BRICS Member Will Help Build a Fair Global Order*. Available at: https://infobrics.org/post/43484/

Coulthard, A. 1995. George Michael v Sony Music – A Challenge to Artistic Freedom? *The Modern Law Review*. 58(5): pp.731–744. Available at: https://onlinelibrary.wiley.com/doi/10.1111/j.1468-2230.1995.tb02047.x

Freeman, A., 1998a. GATT and the World Trade Organisation. *Labour Focus on Eastern Europe*, Number 59, 1998, pp.74-93.

Freeman, A., 1998b. The New World Order: GATT and the World Trade Organisation, in Hutchinson, F., 1998. *What everybody really wants to know about money*, pp.113-131. Charlbury: Carpenter.

Freeman, A., 2024. *Naming the World Minority. Valdai Discussion Club*. Available at: https://valdaiclub.com/a/highlights/naming-the-world-minority/

Freeman, A., 2020. [2019q]Creative Labor, Mental Objects and the Modern Theory of Production. *Science and Society*, 84(4). Available at: https://guilfordjournals.com/doi/pdf/10.1521/siso.2020.84.4.458

Freeman, A., 2025. DeepSeek and OpenSource: a New Property Form in the Making. *Marxistische Blätter*, accepted for publication.

Hoekman, B. M., and Kostecki, M. M., 1995. *The Political Economy of the World Trading System: from GATT to WTO*. Oxford: OUP.

Mandel, E., 2024 [1974] *Late Capitalism*. London: Verso Books.

Maskus, K. E., 1993. Intellectual Property Rights and the Uruguay Round, *Economic Review, Federal Reserve Bank of Kansas City*, pp.11-23; reprinted in King, P., 1995, *International Economics and International Economic Policy*. New York and London: McGraw-Hill.

Toye, J.F.J., Toye, R., 2003. The Origins and Interpretation of the Prebisch-Singer Thesis. *History of Political Economy*, 35(3), pp.437-467. Available at: https://muse.jhu.edu/article/46958

United Nations. *Yearbook of International Trade Statistics*.

Wisuniewski, J.B., 2020. *On the Impossibility of Intellectual Property*. Available at: https://mises.org/quarterly-journal-austrian-economics/impossibility-intellectual-property

Review of the 12th Annual International Conference on the Global Economy, "Challenges of Catch-up: Emerging Countries in the Global Economy"

On December 4–6, 2024, the School of World Economy of the HSE University held the 12th Annual International Conference on the Global Economy. This time conference was entitled "Challenges of Catch-up: Emerging Countries in the Global Economy." The conference was devoted to the challenges facing the Global Majority, including the problems of inequality, economic growth and sustainable development, as well as the agenda and results of the Russian chairmanship in BRICS. The conference was attended by leading Russian researchers in the field of world economy, as well as representatives of Armenia, Brazil, China, Morocco, Turkey, and Uzbekistan. English as the working language of the conference made it possible to ensure interactive and fruitful discussion among the participants, as well as to make the conference materials available to the international academic community.

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The conference was officially initiated by *Anastasia Likhacheva*, dean of the Faculty of World Economy and International Affairs, HSE University, and *Igor Makarov*, head of the School of World Economy, HSE University. Likhacheva underscored the significance of the conference theme, highlighting the substantial potential inherent in developing countries to devise novel approaches and models for socio-economic advancement. Presently, the global economy is experiencing significant influence from shifts in political landscapes. However, when conducting analyses, it is imperative to prioritize the examination of long-term structural transformations. Makarov placed particular emphasis on the expanding role of developing countries in the global economy and technological advancement. This, in turn, necessitates alterations in the existing global regulatory system. This includes the imperative for these nations to be better represented within international institutions and the creation of novel economic development models.

The conference program was divided into **four sessions**:

- Session 1. Fragile Convergence: Past, Present and Future of Inequality between Countries.
- Session 2. Lighthouse of Successful Catch-up: Growth Stories in Changing Global Environment.
- Session 3. The Voice of the World Majority: BRICS in the First Year after Expansion.
- Session 4. Unfinished Business: What is the Future of the Sustainable Development Goals?

The first session was opened by its moderator, *Alexander Kurdin*, deputy dean of the Faculty of Economics, Lomonosov Moscow State University (Russia). He stressed the impact of the fragility of global governance on the world economy and expressed the opinion that recent events, including the rise of Donald Trump to power in the United States, will lead to an increase in isolationist sentiments and pose a threat to globalization and the developing world. Nevertheless, developing countries have demonstrated resilience during the COVID-19 crisis and in the context of geopolitical tensions, so they will be able to remain drivers of global economic growth.

The first presentation of the session on economic growth and the traps in its path was delivered by professor *Leonid Grigoryev*, academic supervisor of the School of World Economy (Russia). He first emphasized the need to understand the mechanisms of interaction between politics and economics, without which it is impossible to take effective actions to achieve sustainable growth in the face of threats and uncertainty. Groups of countries with different levels of per capita income were considered. It was shown that low-income countries in recent years are in fact lagging behind—they are growing at the expense of resource factors, but have no significant increase in factor productivity. The speaker dwelt on such issues of uneven growth of countries as volatility of commodity prices, inflation, slowdown of investment growth, migration, high volumes of European capital flows to the US. At the end of the presentation, it was emphasized that relative poverty and persistent social inequality even in developed countries remain pressing problems that need to be addressed.

TEPAV executive director *Gülbin Şahinbeyoğlu* (Turkey) in her report "New Growth Strategies for BRICS+ and Turkey" raised the issue of the changing global balance of economic power, emphasizing the declining share of developed economies in global GDP and the growing share of developing countries, especially Asian countries. BRICS countries also contribute significantly to the global economy. The speaker noted that developing countries are facing growth challenges, increasing debt and declining export competitiveness, emphasizing the importance of green transition and development of sustainable cities, and considered aspects such as the role of technology, trust in the state and policy coordination. The report focused on the challenges faced by developing countries with regard to access to domestic financial markets, high public debt and rising interest rates. The author concluded that developing countries need to develop domestic capital markets and financial infrastructure to address debt problems.

Anastasia Podrugina, associate professor at the School of World Economy (Russia), gave a comprehensive review of the topic of sovereign debt in high interest rate era. The speaker reminded that the World Bank's 2022 report noted a high level of debt in developing countries due to high interest rates and stable inflation. Developing countries often borrow due to limited domestic financial markets, which leads to the growth of external debt, so access to domestic markets is crucial for them. The expert expressed concern about high interest rates, which affect all countries, including the United States, and are related to fighting inflation and protecting the currency. In this environment, developing countries faced the need to refinance debt at higher interest rates, which increased the risk of default.

Ksenia Bondarenko, associate professor at the School of World Economy (Russia), devoted her report to the most significant global trends characterizing the gap between the economies of developed and developing countries. For example, China, Brazil and India demonstrate growing economic power and occupy an increasingly influential position in the world. However, despite this, in general, the gap between developed and developing countries is widening. The expert noted the rise in inflation in the Eurozone, caused by economic problems rather than central bank actions, as well as the weakening of the dollar and the growth of European investment in the United States. The speaker concluded that convergence among developing countries could be expected, but that some of them required more support to accelerate their growth.

The session ended with a presentation by *Nicolas Buchoud,* senior advisor to the CEO, the Asian Development Bank Institute. The expert touched upon the problem of middle-income countries, noting that the key factors of their successful growth are the quality of urban infrastructure, governance, banking system, and education. Special attention was paid to the contradictions faced by global cooperation on sustainable development—developed countries should finance developing countries, but there are not enough mechanisms to do so. With regard to attempts to integrate the sustainable development agenda into economic policy, it was noted that it had become more of a way of maintaining existing production patterns. In conclusion, the speaker raised the need to combine theoretical and practical approaches to develop solutions, and the importance of further discussion of the economic, social and geopolitical factors affecting economic development.

The second session of the conference "Lighthouse of Successful Catch-up: Growth Stories in Changing Global Environment" was devoted to discussing cases of different countries that have managed to demonstrate high rates of economic growth in recent years. The session was opened by *Igor Makarov*, head of the School of World Economy, who noted that despite the absence of universal recipes for development, the study of best practices will help to draw useful lessons. Certainly, it may not be possible to repeat some examples, such as the economic miracle of the Asian Tigers, but their study can contribute to the elaboration of new development strategies.

Abdelaaziz Ait Ali, head of research in economics, Policy Center for the New South (Morocco), presented a report on "The New Challenges to North African Countries' Growth Models Amidst Global Transformations." First, the speaker focused on the need for the countries of the region to use industrial policy instruments due to the active interference of developed countries in their economies in violation of the principles of free trade (an example of which is the EU border carbon adjustment mechanism). Another important aspect is the green transition, which creates opportunities for North African countries with significant renewable energy potential. A serious problem is the falling share of industry in GDP—modern technologies reduce the need for labor, which reduces the potential of industrialization as a growth driver for North African countries. The expert emphasized the risks of the region's dependence on the EU, which is experiencing an economic downturn, noted China's growing interest in investing in the region and suggested diversification of partnerships and more active use by North African countries of their natural and economic resources as the main strategy.

The presentation of *Mariam Voskanyan*, head of the Department of Economics and Finance at the Russian-Armenian University (Armenia), was devoted to the threats and opportunities facing the economy of the Republic of Armenia. She showed that the financing of the IT sector does not benefit the economy in a meaningful way, and it is necessary to unite the efforts of different sectors into a single institution to work out a common development strategy. The monetary policy of the country based on inflation targeting, which is not suitable for Armenia at the current stage of its development, was criticized. In the fiscal part, the speaker pointed out the problems of small and medium business in the country, which suffers from the tax policy, and proposed to introduce zero tax on income for business in order to stimulate the industry and real sector. Insufficient funding for long-term investments, such as in human capital and infrastructure, was also noted.

Professor of University of Delhi *Varun Kumar Das* (India) presented a paper on "History as a Lighthouse—Learning from the Past: Few Perspectives and Thoughts from India's Experience." India's economy has developed in an unconventional way—instead of the classical transition from agriculture to industry, the country practically passed the stage of industrialization and went straight to the dominance of the service sector. The manufacturing sector is still weak and most of the labor force is employed in agriculture or the informal economy. However, instead of moving to cities to work in factories, Indians often migrate from one rural region to another while continuing to work in agriculture; at the same time, there is a shift of production from urban to rural areas. Overall, India faces a unique economic situation that requires sound policies to support industry and create off-farm jobs.

Wei Feng, dean of the Institute of Economics and Business Administration, Heilongjiang University (China), spoke on the imitation trap and catching-up development. The researcher presented a basic model of endogenous economic growth adapted for developing countries, which considers three types of resources—finance, intermediate goods, and labor. Economic growth was driven by technological progress, which could occur either through imitation of existing technologies or through innovation. It was emphasized that developing countries that were successfully catching up with developed economies were moving from imitation to creating their own innovations, while others might be stuck in the imitation trap. Separately, the report examined the role of government policy in this process—tax incentives, financial subsidies and other measures aimed at stimulating R&D and innovation. For a successful transition from the imitation model to the innovation model, the state should actively invest in infrastructure, education and support for technological entrepreneurship. Access to finance for companies and reducing barriers to the introduction of new technologies also play an important role. The report concludes that in the early stages of industrialization, imitation can be an effective strategy, as was the case in China, but in the long term, sustainable growth is only possible with a shift to self-driven innovation.

Nodira Abdunazarova, chief specialist, the Project on Macroeconomic Policy and Analysis of the Institute of Macroeconomic and Regional Studies (Uzbekistan), in her report reviewed Uzbekistan's path to sustainable development. First of all, the speaker outlined the country's sustainable development priorities, such as maintaining GDP

growth at 3.5% per year, finding new drivers of economic growth, making it more inclusive and addressing environmental issues. However, the economy is currently characterized by high inflation despite rapid economic growth; in addition, there are challenges such as macroeconomic instability and external shocks. To address the above problems, it is necessary to improve coordination of strategic decisions, reduce bureaucracy, improve the quality of public administration and develop domestic production to reduce dependence on imports and create a competitive economy.

The final report of the second session and the first day of the conference was presented by *Evgeny Biryukov*, senior research fellow at the Institute of Economic Forecasting of the Russian Academy of Sciences (Russia) on the topic "Arabian Model: Unique Modernization / Catch-up." Arab countries, despite high growth rates, have a low share of manufacturing in GDP, and the key factor of their development is the oil industry. For example, Saudi Arabia and other countries in the region have received huge revenues from oil exports since 1966, which allowed them to develop social programs, ensure high living standards and invest in foreign assets. In recent decades, however, the pattern of development has begun to change. In response to falling oil prices and a budget crisis in 2014, Saudi Arabia adopted the Vision 2030 program, which aims to diversify the economy, increase taxation and develop the private sector, as well as social changes such as allowing women to drive cars and loosening religious control. The main strategy of Arab countries is to turn oil into the basis for the development of other sectors such as industry and services, which requires significant investment and the creation of new technologies domestically.

The third session of the conference "The Voice of the World Majority: BRICS in the First Year after Expansion" was opened by *Alexandra Morozkina*, deputy dean for research, Faculty of World Economy and International Affairs, HSE University (Russia), who noted that Russia, as the BRICS Chair in 2024, faced a difficult task of integrating new members into more than ten official formats, including ministerial, academic, municipal, ethnic, cultural, and others. In this regard, discussing the BRICS expansion process in a separate session is particularly relevant.

Andrey Gnidchenko, senior expert of the Center for Macroeconomic Analysis and Short-Term Forecasting (Russia), opened the session by analyzing the role of the BRICS in the global economy and catching-up development. It was noted that the BRICS does not yet represent the majority of the world economy but is rapidly moving in this direction—by 2030 BRICS++, including new members and partners, may surpass its opponents in terms of total GDP. The expert emphasized that within the bloc the pace of development varies—India, Egypt, and Ethiopia are growing rapidly, while South Africa and Iran are experiencing stagnation. From the point of view of catching-up development, the countries that have made significant progress—China, Kazakhstan, Turkey, Belarus, and others—were singled out. In conclusion, the speaker noted the need to deepen cooperation in trade, investment and infrastructure within the grouping in order to narrow the development gap between the BRICS countries.

Bruno de Conti (Brazil), associate professor at the University of Campinas, discussed in his presentation the implications of the BRICS expansion. The expert explained the growing interest in joining BRICS by way of the multidimensional global crisis

(humanitarian, environmental, and social) and the ineffectiveness of the current system of global regulation. The pandemic and geopolitical crises demonstrated the inability of developed countries to cope with the challenges, which strengthened the desire of the World Majority countries for alternative associations such as BRICS. The key achievement during Russia's presidency in 2024 has undoubtedly been the expansion of the bloc. At the same time, an increase in the number of participants is crucial in order to strengthen the voice of the World Majority, despite the existing differences between the participating countries. The speaker expressed the opinion that expansion can increase the effectiveness of the bloc, while such aspects as flexibility in decision-making are important, when not all countries are obliged to participate in specific initiatives, such as the New Development Bank or possible BRICS currency. The speaker concluded by calling for a common agenda on climate issues and emphasized that despite governance challenges, BRICS expansion is a positive step.

Xiaochen Hou, program manager of the Center for BRICS Studies at Fudan University (China), spoke about the challenges and opportunities for cooperation among the BRICS countries. The expansion of the organization has been a major development, but it faces a number of challenges—disagreements in the BRICS countries' voting in the UN, the need to reform decision-making mechanisms, risks to the credit rating of the New Development Bank, and the need to build balanced relations with both the Global South and the West. At the same time, new opportunities are opening up for BRICS. Among them are industrial, financial and energy cooperation, as well as strengthening its role in global regulation and security.

Vladimir Zuev, head of the Department of Trade Policy, HSE University (Russia), raised the issue of the need to create a system of indicators to measure the BRICS achievements. Traditional indicators (share in global GDP, trade, and investment) do not reflect the real influence of BRICS as an organization and attempts to develop a different system of indicators have encountered disagreements among the member countries. The expert suggests reducing the number of indicators and focusing on indicators reflecting cooperation within BRICS, such as the volume of trade and investment between the countries. He emphasized that BRICS' contribution to the global economy is growing, but domestic trade and investment remain at a low level. For an objective assessment of the BRICS role, it was suggested to take into account additional parameters, such as the divergence in voting on international platforms, the number of joint projects and initiatives. In conclusion, the expert emphasized that the BRICS should pay more attention to deepening interaction between the member countries.

The presentation by *Bashir Adelowo Wahab*, research fellow at the School of World Economy (Russia), was devoted to the consequences of the BRICS group expansion. The speaker analyzed the impact of the expansion on international trade, foreign investment and economic growth of these countries. The main attention was paid to changes in trade and foreign investment between the old and new BRICS members, as well as interdependence in the sphere of natural resources, primarily oil and gas. According to the expert, an important point is that the new members can benefit greatly from expansion through access to larger markets, improved investment attractiveness and enhanced energy security. However, it should be taken into account that the economies

of the old BRICS member countries are more closely linked to each other than to the economies of the new member countries.

Marcel Salikhov, president of the Institute for Energy and Finance Foundation (Russia), focused his presentation on the financial aspects of cooperation within the BRICS framework, addressing such issues as the launch of BRICS Pay and the creation of a common currency. It was noted that BRICS Pay is not yet a concrete instrument, and the idea of a common BRICS currency has no economic justification due to limited mobility of labor and capital and weak trade integration between the countries. The speaker emphasized that the US dollar continues to dominate international payments and reserves despite attempts to replace it with other currencies such as the yuan. The issue of creating a common currency remains controversial, especially when the internal efficiency of BRICS and its institutions, in particular the New Development Bank, remains low. Overall, the expert called for more practical actions within the BRICS framework, noting the large number of discussions with a lack of real results.

At the end of the third session, the report "Towards Global Green Leadership: BRICS Cooperation Priorities on Coping with Climate Change," prepared by the Laboratory for Economics of Climate Change, HSE University, and the International and Comparative Law Research Center (ICLRC), was presented. The report was presented by its authors—*Alexandra Khlebnova*, head of the Climate and Environment at ICLRC, and *Igor Makarov*, head of Laboratory for Economics of Climate Change (Russia).

Khlebnova noted that previously the topic of climate change was formally presented in BRICS, but in recent years it has received more attention. Thus, the summits in Johannesburg and Kazan consolidated a common approach to climate policy. And under the Russian presidency in 2024, the BRICS Contact Group on Climate Change and Sustainable Development was established and a Framework for Climate and Sustainable Development was adopted. The BRICS countries support the UN principles on the leading role of developed countries in combating climate change. Russia shares these views, but being an Annex I country of the UNFCCC, unlike its BRICS partners, it cannot qualify for climate finance. The expert recalled that the 2024 UN Climate Change Conference discussed primarily the issues of financing and suggested that the next conference in Brazil will focus more on biodiversity, protection of the Amazon and a just energy transition.

Makarov also emphasized that climate has not been a priority for BRICS for a long time, but the situation is changing. The BRICS countries differ greatly in their energy mix and climate policies, but cooperation is necessary—after the BRICS expansion, the BRICS is responsible for more than half of global emissions. The dynamics of emissions in the countries of the grouping are heterogeneous: China and India have increased their emissions several times over 30 years, while Brazil has reduced them and Russia has drastically reduced them, mainly due to the economic crisis of the 1990s. The countries' climate goals and policy instruments differ as well (for example, China uses cap-and-trade, South Africa uses a carbon tax, and Russia is testing a pilot system of carbon pricing at the level of only one region). The expert proposed four priorities for climate cooperation within BRICS. Firstly, it is necessary to adopt common principles of climate policy, including technological neutrality, reducing emissions together with addressing

other sustainable development issues, dialog between exporters and importers of fossil fuels, etc. Secondly, it is important to develop expert and analytical cooperation, including the development of BRICS-specific competence centers. Thirdly, it is necessary to calculate consumption emissions along with production emissions, which is beneficial for most BRICS countries, as they are net exporters of carbon-intensive products. Fourthly, it is necessary to create infrastructure to attract financing from developed countries to make it cheaper to reduce emissions in developing economies. Together, these will help to shape a fair and effective climate policy both in the BRICS and, in time, at the global level.

The fourth session of the conference "Unfinished Business: What is the Future of the Sustainable Development Goals?" was opened by academician of the Russian Academy of Sciences *Natalya Ivanova*, head of Research, Science and Innovation Department, IMEMO (Russia), who noted the scale of the UN goals and the non-fulfillment of most of them, and also raised the question of what should be the sustainable development agenda after 2030.

The first report of the session was delivered by *Igor Makarov*, head of the School of World Economy and Laboratory for Economics of Climate Change, HSE University (Russia) and was devoted to the topic of risks of green transformation of the world economy. These risks are primarily caused by external factors, such as the decline in global demand for fossil fuels and carbon-related trade barriers. The expert considered the prospects for hydrocarbon exports from Russia in various decarbonization scenarios, including the implementation of the Paris Agreement goals. Transition risks remain high. Nevertheless, the recent reorientation of supplies to Asian markets has significantly increased the resilience of the Russian economy to the risks of global decarbonization. Separately, the results of modeling scenarios for the introduction of a carbon-related trade barrier in China were presented and it was shown that it will not have a significant impact on gross Russian exports, although it may be sensitive for individual companies in carbon-intensive industries.

Anna Galkina, senior researcher at the Energy Research Institute of the Russian Academy of Sciences (Russia), presented a paper on "Some Global Energy Scenarios: Not Normative but Descriptive Approach." The expert presented three scenarios of global development in the field of energy: (1) "Fog," in which the world is divided into two poles, the relationship of which is characterized by trade barriers, limited technology exchange, the gap in emissions prices between developed and developing countries; (2) "Split," in which there is increased fragmentation of the world economy, weakening international cooperation; and (3) "Key," characterized by active cooperation between countries, increased investment and more active energy transition. The main conclusions of the report can be summarized as follows: global energy consumption continues to grow, especially in developing countries, albeit at a slowing rate; energy intensity is declining but the gap between developed and developing countries remains; renewable energy and fossil fuels will not be competitors but rather complementary; oil and gas markets will remain volatile and CO_2 emissions will not peak until 2035–2040; political will and international negotiations can significantly change the situation.

The report by *Kazi Sohag*, a lead researcher at the Ural Federal University (Russia), was devoted to geoeconomic fragmentation and environment, as well as related aspects

of energy, industry, inflation, and environmental policy. The expert considered four key topics: (1) energy dependence on Russia and the consequences of Russia–EU energy integration; (2) industrial production under geopolitical risks, in particular, the impact of energy shocks and gas and oil price volatility on European industry; (3) sanctions, inflation, and economic shocks, including the impact of the Russia–Ukraine conflict on inflation in the EU, the growth of energy and food prices; (4) environmental policy—the progress of countries in meeting the goals of the Paris Agreement and the economic consequences of EU environmental initiatives. The expert criticized the lack of market mechanisms and suggested that the United States is pursuing a strategy of non-cooperation in the field of climate policy. The key message of the speech is that global cooperation is the only way forward, but due to the geopolitical interests of the US and the EU, confrontation will remain the most likely scenario.

Sergey Bobylev, head of the Environmental Economics Department, Faculty of Economics, Lomonosov Moscow State University (Russia), presented his vision of the issues discussed at the session. The expert pointed out that among all types of risks facing mankind, environmental risks cause maximum concern. The speaker considered the transformation of economic theory necessary for a full-fledged economic analysis of these risks and pointed out the need to include environmental and social factors in traditional macroeconomic indicators. The issues of market regulation, the role of government and business in achieving sustainable development were also touched upon. In conclusion, the expert emphasized the importance of revising the methods of assessing progress and development, as existing indicators such as GDP do not reflect the real situation.

The final report of the session and conference was presented by *Sedat Alataş*, a researcher at Aydın Adnan Menderes University (Turkey), on "What Drives Eco-Innovation in Turkish SMEs?". Turkey is striving to meet carbon reduction and resource conservation targets despite high economic growth and industrialization. However, this requires significant funding—both from domestic and external sources. SMEs play an important role in eco-innovation, accounting for a large share of the country's output. But their innovation potential is limited, also due to a lack of financing. In particular, only a quarter of Turkish SMEs use government grants and subsidies. It is concluded that the main drivers of innovation activity of Turkish SMEs are their own financial resources and technological developments, while the role of public subsidies remains limited.

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The participants and organizers highly appreciated the results of the conference, noting the importance and relevance of the issues discussed and the discussions held. Special appreciation and gratitude were expressed to the foreign participants who came to Russia. The organizers hope that the 12th Annual International Conference on the Global Economy entitled "Challenges of Catch-up: Emerging Countries in the Global Economy" will contribute to further joint research, development of cooperation, and continuous exchange of knowledge and opinions in the field of world economy.

AI technologies were used in the preparation of the material: ChatGPT, DeepL, NeuralWriter.

Our authors

Vladimir Bartenev — leading research fellow at the Institute for Advanced Strategic Studies of the HSE University.

Raosaheb Bawaskar — convener, Center for China Studies, Maharashtra National Law University, India and founder of the Water Policy Center, India.

Alan Freeman — research affiliate, University of Manitoba and University of Greenwich.

Henock Getachew — senior researcher in the Institute of Foreign Affairs, Addis Ababa, Ethiopia.

Viktoriya Hayrapetyan — associate professor at Russian-Armenian University (Yerevan, Armenia).

Garik Petrosyan — PhD in Economics, senior lecturer at the Russian-Armenian University (Yerevan, Armenia).

Heghine Petrosyan — PhD in Economics, senior lecturer at the Russian-Armenian University (Yerevan, Armenia).

Irina Petrosyan — PhD in Economics, head of the Department of Economic Theory and Issues of Transition Period of the Russian-Armenian University (Yerevan, Armenia).

Elena Sapir — professor, head of the Department of World Economy and Statistics, P.G. Demidov Yaroslavl State University.

Dareskedar Taye — lead researcher in the Institute of Foreign Affairs, Addis Ababa, Ethiopia.

Alexander Vasilchenko — junior researcher at the Institute of Europe of the Russian Academy of Sciences, postgraduate student of the Department of World Economics and Statistics, P.G. Demidov Yaroslavl State University

Mariam Voskanyan — doctor of economics, associate professor and head of department at Russian-Armenian University (Yerevan, Armenia).