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The Problem of Asymmetric Development of the Global Financial Market

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ABSTRACT

The transformation of the modern global monetary and financial system involves the elimination of institutional and functional contradictions existing at various levels. Some contradictions arose as a result of the asymmetric development of the global financial market (GFM). **The aim** of the article is to substantiate the asymmetry of the GFM development as an organic phenomenon, which, on the one hand, becomes a serious obstacle to the functioning and progressive development of the world economy, and, on the other hand, is the driving force behind this development. The authors apply general logical, theoretical, empirical, and special research **methods**. The origins of the asymmetric development of the GFM are determined. Endogenous and exogenous factors of GFM asymmetry were revealed. The article considers examples of asymmetry in various GFM segments. The negative impact of the global financial and economic crisis of 2008–2009 and the coronavirus pandemic on increasing the asymmetry of the GFM development has been determined. Based on the analysis of the key macroeconomic indicators of the top 20 countries in terms of GDP, the asymmetric nature and the absence of stable patterns that determine the country's position in the world ranking are revealed. The authors **conclude** that the asymmetry of the GFM development is an organic phenomenon, caused by a wide range of causes of endogenous and exogenous nature. Endogenous asymmetries can be partially compensated either through complete economic isolation, which is likely to lead to a slowdown in development and lagging behind other countries in the future or through active involvement in a system of world economic relations based on fair partnerships. Exogenous asymmetry, due to the peculiarities of the historically established world order, is destructive for all participants in the global economic system, including those whose interests must be protected in the first place.

Keywords: global monetary and financial system; global financial market; asymmetric development; endogenous and exogenous asymmetry factors; regulatory arbitrage; standardization of operations; regulation of the global financial market; fragmentation of the global financial market; macroeconomic indicators; currency composition

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INTRODUCTION

The transformation of the modern international monetary and financial system (IMFS) is due to the formation of a multipolar world economy [1, p. 191] and is aimed at ensuring its stability and sustainability by eliminating the institutional and functional contradictions and imbalances that exist at various levels. Many contradictions and disproportions of the IMFS arose as a result of the asymmetric development of the global financial market (GFM), which is one of the key elements of the IMFS, in the context of this study, defined as a set of mechanisms for the implementation of international monetary relations, including both the processes themselves and the institutions of financial intermediation, mobilization savings and distribution of credit, as well as the creation and management of money itself [2, p. 456].

Within the framework of the scientific school of the Financial University under the Government of the Russian Federation, GFM is understood as "the form of movement of world finance in certain parameters of international financial relations and the global financial system".[1] The GFM includes a set of interconnected national and international markets that ensure the redistribution of various financial products through financial institutions, which can be conditionally divided into mainly foreign exchange, stock, credit, insurance, and investment.

In practical terms, the GFM is an economic abstraction, since the trade in financial resources and its regulation are always carried out on the territory of a particular country or between countries. This can be traded in both national and international financial resources, in which both residents and non-residents can take part [3, p. 77]. It should be emphasized that, despite the active development over the past decades, the GFM should be considered, first of all, as an auxiliary (servicing) element of the world economic system. Without being tied to real assets, the GMF becomes an increasing abstraction, forming an illusory successful economy based on virtual assets (i.e. potential, not really existing, but possible, which can or should appear under certain conditions) that can instantly lose their value. The secondary, dependent nature of the GFM is confirmed, in particular, by the fact that "the asymmetry of world economic development, erroneous decisions in the choice of directions and prospects for the world economy cause violations and failures in the global financial system" [4].

The doctrine of symmetry originated in ancient Greece when philosophers and mathematicians studied the harmony of the world. In the context of this study, the authors share the point of view of A.V. Shubnikov and V.A. Koptsik that "structureless objects do not exist in nature", that "structurality is a fairly general form of the existence and development of matter",[2] and symmetry is "the law of the structure of structural objects or, more precisely, a group of permissible transformations that preserve the structural integrity of the systems under consideration" [5, p. 323, p. 383].

Socio-economic (social) systems have a complex structure, consisting of a large number of constantly interacting elements, but they, like natural systems, are characterized by a desire for harmonization by maintaining internal integrity and stability, which is ensured by the presence of symmetry. According to A.V. Shubnikov and V.A. Koptsik, "stationary symmetry of isolated systems can change only upwards", and "for dissymmetrization, it is necessary to expand the system, violating its isolation" [5, p. 352].

If we understand the symmetry of the GFM as a mirror correspondence of the interrelated socio-economic and financial parameters that characterize different countries of the world and their interaction and ensure a

[1] World Finance. Ed. by Eskindarov M.A., Zvonova E.A. Moscow: KNORUS, 2017. P. 22.

[2] In this case, we are referring to the social form of matter.

stable state of the world economy and world finances, then, in our opinion, the asymmetry of the financial market can be considered an organic phenomenon, which, on the one hand, becomes a serious constraint that impedes the further functioning and progressive development of the world economy, but, on the other hand, it is the driving force behind this development. Speaking about the financial system, it should be noted that its unstable state is more of a rule than an exception to the rule [6]. In this regard, it seems relevant to analyze the causes and consequences of the asymmetric development of the global financial market.

ORIGIN OF ASYMMETRY OF THE GLOBAL FINANCIAL MARKET

Since, as noted earlier, the GFM is by its nature a serving, secondary element of the global economic system, the origins of its asymmetry should be sought in the basic principles of building the world economy in general and the IMFS in particular. In our opinion, according to the sources of occurrence and the nature of the impact, the factors causing GFM asymmetry can be divided into endogenous and exogenous. Endogenous factors stem from the very nature of international economic relations; their elimination is impossible or impractical. Exogenous factors, on the contrary, are external in relation to the object under consideration and, as a rule, can be corrected. Let us consider in more detail the main factors of an endogenous nature that lead to asymmetry.

The instability of the GFM is one of the manifestations of its essence as a mechanism for the cross-border redistribution of various financial products, which breaks the isolation of the country's economic systems and thereby leads to their dissymmetrization, which, in turn, dissymmetries the GFM itself. Considering the economy of a single country as an isolated system, it can be argued that its state bodies have a sufficient set of tools to maintain internal symmetry and ensure economic balance, however, the possibilities for developing a closed system are significantly limited, therefore, sooner or later (depending on the availability of resources and a number of other factors) it will be forced to one degree or another to engage in the international exchange of goods. The financial stability of a closed state system is ensured primarily by the fact that, as a rule, one currency is used in the country, the issue and circulation of which are strictly controlled by a single center. That is why counterfeiting was recognized as a serious crime at all stages of the development of the Russian state. Strict penalties for counterfeiting banknotes are also established in most countries [7, p. 69].

When two countries enter into commodity exchange relations, their internal economic systems cease to be closed, isolation is broken and conditions for dissymmetrization are created. Along with new opportunities, cross-country commodity exchange gives rise to certain problems, as it disrupts the existing balance. First of all, the question arises of choosing the currency of the transaction, since the payment can be made in the currency of the exporter, in the currency of the importer, or in another currency other than the monetary units of the participants in the transaction.

If, for example, payment is made in the importer's currency, then the contractual amount of "foreign" currency enters the exporter's country, which, in order to restore equilibrium, should be directed to the purchase of the importer's country goods. Since, as a rule, transactions are carried out with the participation of a certain number of market participants, the circulation of "foreign" currency occurs in the exporting country, which, in the absence of state control and regulation, can lead to economic imbalance. In the event that all the "foreign" money that entered the country is immediately used to pay for goods from the importing country, the balance is not disturbed, and the economy continues to function in its usual format, using the advantages of international

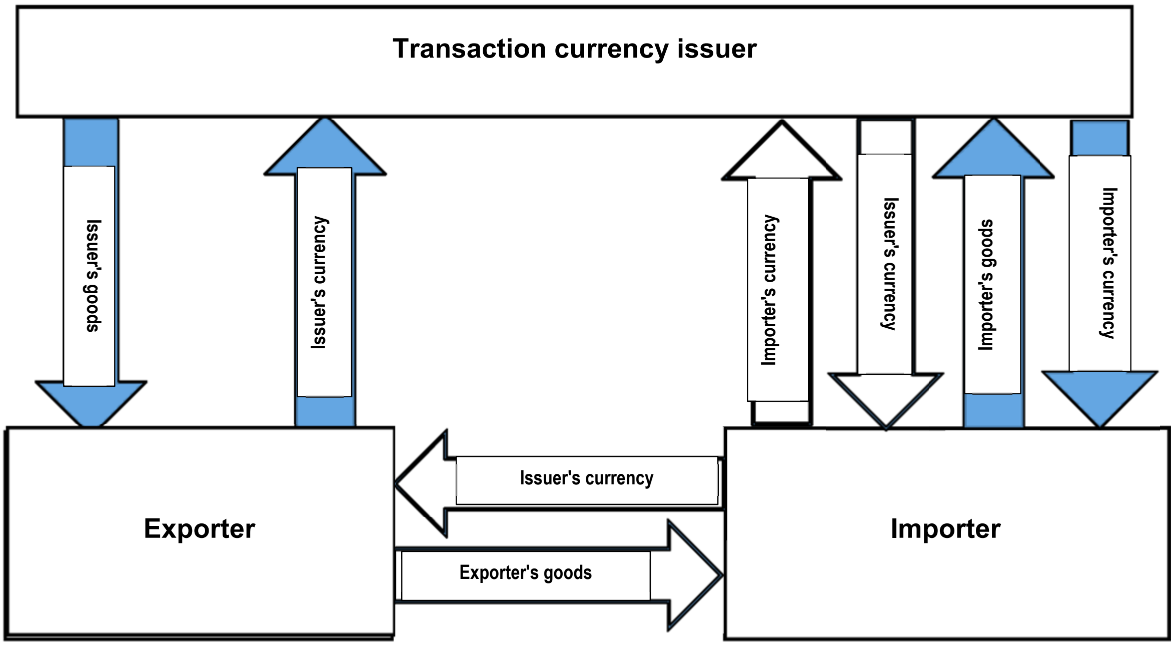

Fig. 1. **Model of maintaining the balance of three participants in cross-country commodity exchange**

Source: compiled by the authors.

trade. Such a model of foreign economic policy was, in particular, characteristic of the Council for Mutual Economic Assistance (CMEA) created after the Second World War, headed by the USSR [8, p. 255]. Foreign trade in the CMEA countries was a state monopoly, which completely ruled out the possibility of uncontrolled operations.

When using a currency other than the monetary units of the participants in the barter transaction as a means of payment, the situation is even more complicated, since the threat of economic imbalance arises among all market participants. The exporter must purchase the goods of the issuer of the "foreign" currency received by him, the importer must ensure the availability of the goods required by the issuer of the "foreign" currency, and the issuer of the currency, which needs to purchase the goods of the importing country, must return the "foreign" money previously exchanged on its currency, as well as to ensure the possibility of buying its goods for the exporter. *Fig.* schematically describes the situation above. Colored arrows indicate transactions that have a balancing nature in relation to the main transaction.

If all international trade transactions were symmetrical, then countries could agree that they would all be carried out, for example, in the exporter's currency. In this case, all currencies of all participants would actually receive the status of "international", but at the same time, each country pair must ensure the balance of bilateral export-import transactions, which significantly limits the possibilities of international trade due to different levels of economic development, different resource endowment, different involvement in the global division of labor and other regional differences between participants in foreign economic activity (FEA).

Thus, the rejection of economic isolation necessitates the internationalization of currencies, i.e. "the exit of the national currency beyond national borders by assuming the functions of (1) settlement and circulation, (2) accumulation, and (3) a universal measure of value in international economic relations"[3] and becomes an endogenous factor

[3] Internationalization of the ruble: Prospects and risks, as well as the role of the Russian ruble in foreign economic relations. Analytical note of the Bank of Russia, July 2017. URL: https://cbr.ru/Content/Document/File/16745/01.pdf (accessed on 10.04.2022).

Table

Functions of world money

Money function	Private use	Official use
Medium of exchange	Vehicle currency a) In goods exchange: – foreign trade vehicle; – domestic trade vehicle (direct currency substitution); б) In currency exchange: – FOREX vehicle	Intervention currency
Unit of account	**Quotation currency**	**Pegging currency**
Store of value	Investment currency (including indirect currency substitution)	Reserve currency

Source: Hartmann Ph. Currency Competition and Foreign Exchange Markets: The Dollar, the Yen and the Euro. Cambridge University Press. 1998. P. 14 [9].

predetermining the further asymmetry of both the IMFS as a whole and GFM in particular.

In our opinion, the most correct definition of the process of internationalization of currencies is the broad interpretation proposed by Ph. Hartmann, who, based on the analysis, concluded that "the internationalization of a currency begins when an individual agent or institution located in a country other than the country of this currency, accepts or uses it as a medium of exchange, a unit of account or a store of value" [9, p. 14]. As a result of internationalization, national money is transformed into international (global) money. Ph. Hartmann systematized the functions of international money as follows (*Table*).

The approach proposed by Ph. Hartmann allows one to form a comprehensive understanding of the functions of world money, which differ depending on the type of subject using them. As a rule, in the scientific literature, these sets of functions are analyzed separately, which does not give a complete picture of world money and can lead to erroneous conclusions about their role. Meanwhile, it is world money that becomes the main factor influencing the formation of the world order and predetermining the emergence of imbalances and contradictions associated with dissymmetrization.

The subject that carries out the official use of world money is the state represented by the central bank, the ministry of finance, and other similar structures. An agent appointed by the state affects the exchange rate of the national currency, interfering in the functioning of the foreign exchange market through interventions. Since the national currency can be exchanged for many foreign currencies, the agent first needs to determine the intervention currency. Intervention is carried out only in those currencies in which the central bank has certain reserves. Under conditions of floating rates, the central bank is forced to diversify the structure of its reserves in order to reduce the risk of their depreciation. Sometimes central banks choose an anchor currency against which the national currency rate must be maintained at a fixed level (or fluctuate within a certain interval). In this case, world money performs the function of a measure of value.

Private use in this context implies a broad interpretation that includes all types of commercial transactions. As a medium of exchange, payment currencies or, in other words, vehicle currencies can be used in barter and currency exchange transactions.

In turn, barter operations can be carried out both between countries (foreign trade operations) and within individual countries. Barter transactions give rise to the need to form a foreign exchange market, operations of which can be both bilateral (when one currency is exchanged for another by the type of "currency barter"), and multilateral using the world vehicle currency, which, as a rule, is the most "liquid" currency.

The quote currency is the currency in units of which the price of a good or asset is expressed if it differs from the national currency of the supplier of the good or the owner (issuer) of the asset. Investment currencies are currencies in which transactions with assets are carried out, including bonds, deposits, etc.

The participation of countries in world trade has always been unequal, therefore, as a result, some of them had a deficit in the balance of payments, while others (active exporters) had a large surplus, which created the prerequisites for an internal economic imbalance in both of them. If countries with a surplus could, for example, simply increase their reserves, then to compensate for the deficit, more active actions were needed (in particular, of a deflationary nature, which had a negative impact on their domestic economy), including with the participation of surplus countries (in particular, lending to "deficit" countries or buying their national currencies).

The competition of currencies that occurs during the process of internationalization reinforces the asymmetry, since some currencies are more universal and stable, and therefore are used more often than others. In economic history, various "currency wars" have repeatedly arisen, causing serious concern for the leaders of states, since they could arise unexpectedly and have a strong negative impact on the national economy. The active development of international trade has caused the need to coordinate the actions of the countries participating in foreign economic activity in the financial sector, which, in fact, is the basis of the world order, recognized and observed by most countries of the world. One of the key goals of the formation of the global world order is to minimize the negative consequences of dissymmetrization that occurs in the process of the development of world trade for endogenous reasons.

MANIFESTATION OF EXOGENOUS ASYMMETRY OF GFM

The asymmetry of the IMFS in general and the GFM in particular, due to endogenous reasons, is intensified under the influence of external factors related to the peculiarities of the established institutional and functional structure, as well as the mechanisms for its regulation at the national and supranational levels. Let us consider some examples of exogenous asymmetry in more detail.

Asymmetry as one of the problems of modern GFM has been studied in the works of a number of Russian scientists. In particular, L. Krasavina noted the discrepancy between the Jamaican monetary system and the new realities [10]. E. Rozhentsova believes that any asymmetry violates the stability of the monetary system and forces countries to leave it, which, in turn, reduces its quality as a whole [11]. E. Zvonova identified forms of asymmetry in the mutual exchanges of the Russian and European financial markets and analyzed the risks of the identified forms of asymmetry [12]. A. Kuznetsov drew attention to the asymmetry in access to capital markets [13].

One of the examples of exogenous asymmetry is considered, in particular, in the study of O. Butorina. Based on the analysis, she came to the conclusion that, although one of the main goals of creating a single European currency was to eliminate the asymmetry of the mechanism of collective floating of currencies, nevertheless, due to the weakening of the automatic stabilizers of the economy, the reduction of national monetary policy instruments and the growth of interdependence the creation of an economic and monetary union retained a high degree of asymmetry [14].

The IMFS that has developed to date began to take shape after World War II and actually represents the implementation of the idea of creating the "American World" (Pax Americana), the foundations of which were laid by US President Wilson at the beginning of the 20th century [15, p. 133]. The special role of the United States in the modern system of world finance is emphasized, in particular, by experts from the European Central Bank [16]. They note the significant impact of changes in the US financial and economic system on the state of the economy and finances of the euro area countries. At the same time, problems arising in the financial and economic sphere of the euro area have a much smaller impact on the state of the US economy and finances (in contrast, for example, to an increase in the level of risk in the global financial system). Thus, the impact of changes in the GFM on the macroeconomic indicators of individual countries (or groups of countries) largely depends on what (or who) is the main driver of these changes. This is one of the manifestations of the exogenous asymmetry.

Liberalization of the functioning of the GFM at the turn of the 20th-21st centuries led to the growth of virtually generated profits and the separation of the prices of various financial assets from their economic basis, there was a "financialization of the world economy, i.e. advancing the development of the financial system in comparison with other sectors" [17, p. 6].

The increase in the volume of capital on the GFM contributed to a decrease in its value and an underestimation of investment risk. On the part of international investors, a markedly increased "appetite" for risk was noted, which as a result led to the phenomenon of its extremization, i. e. increased willingness of investors to take on existing risks [18]. On the other hand, companies and banks began to actively use cheap debt financing to develop their business to the detriment of the need to reduce their production costs. The weakening of control over operations at the GFM eventually destabilized the world economy, increased its asymmetry, making it more sensitive and receptive to various shocks and upheavals, and also led to the frequency and deepening of financial and economic crises at various levels. The climax in this respect was the global financial and economic crisis of 2008–2009.

The COVID-19 pandemic has become one of the exogenous factors intensifying the asymmetry in the development of GFM. Many enterprises have temporarily suspended their activities, severe restrictions on movement around the world have been imposed on individuals, a critical situation has developed in the financial markets, confidence on the part of business and market participants has been lost, and general uncertainty has increased. As a result, output in many countries dropped significantly, and consumer spending fell by a third.[4] Governments around the world have been forced to take unprecedented measures to combat the corona crisis, resulting in a sharp increase in public spending. In terms of its scale, the negative impact of the coronavirus pandemic on the global economy and global finances has significantly exceeded the consequences of the 2008–2009 crisis.

The Asian Development Bank Institute, based on a study of changes in macroeconomic and financial indicators of 38 countries (including 14 developing countries), concluded that as a result of the pandemic, developing countries (especially in Asia and Europe) suffered compared with developed countries [19]. The corona crisis has had a very negative impact on stock prices, bond yields, and the

[4] Global financial markets policy responses to COVID-19. OECD. 01 April 2020. URL: https://www.oecd-ilibrary.org/finance-and-investment/global-financial-markets-policy-responses-to-covid-19_2d98c7e0-en (accessed on 12.04.2022).

exchange rates of the national currencies of developing countries, and has also led to a sharp and significant outflow of capital. In addition, the influence of a number of global factors and the results of the activities of the world's leading financial centers on the state of the economy of developing countries was revealed.

In recent years, the asymmetric development of the GFM has also increased due to the active inflow of capital from China. If previously accumulated funds within the country were accumulated in the accounts of the People's Bank of China or used to develop the national economy, now domestic investors are looking for the possibility of diversifying investments in profitable projects in other countries [20]. The main driver of China's portfolio investment abroad is institutional investors, who are showing an increased interest in acquiring shares in high-tech companies in developed countries. In addition, Chinese portfolio investments in other countries are directed mainly to those sectors of the economy that are underdeveloped in China and are concentrated in those countries where these sectors of the economy are most developed. Moreover, the level of profitability of overseas portfolio investments is by no means always the determining motive for Chinese institutional investors. As a result, the massive influx of Chinese domestic savings to the GFM, which are distributed there extremely unevenly, disrupts the symmetry and balance of its development.

The analysis of statistical data carried out by the authors as part of the study allows us to illustrate the presence of asymmetry in various segments of the GFM. For example, according to the Bank for International Settlements (BIS), at the end of Q4 2021, the share of the US dollar in the total volume of outstanding international debt securities in the international debt market was 47.1%, the share of the euro was 38.3%, the share of the pound sterling — 7.9%, and the share of the Chinese yuan — only 0.4%.[5] At the same time, according to the World Bank (WB), in 2021, the United States accounted for 23.9% of global GDP (current US$), China — 18.5%, the euro area — 15.1%, and the UK share — 3.3%.[6]

According to the IMF, in the fourth quarter of 2021, the total volume of official international reserves reached a value equivalent to 12,937.27 billion US dollars, of which the US dollar accounted for 58.9%, the euro — 20.6%, the Japanese yen — 5.5%, the pound sterling — 4.8%, the yuan — 2.8%.[7] It is obvious that the US dollar still remains the main world reserve currency, which is a direct consequence of the historically established structure of the world monetary system. The absence of an equivalent alternative contributes to the preservation and strengthening of the role of the US dollar as the main world currency, although the economic role of the United States is gradually becoming less significant: if in 1960 the US accounted for almost 40% of world GDP, then over the period from 2000 to 2021, the share of the United States in world GDP, calculated in accordance with purchasing power parity, fell from 20.9% to 15.7%.[8]

Among the currencies of developing countries, the most widely used currency internationally is the Chinese yuan. According to SWIFT, in January 2022, the yuan ranked fifth in terms of share in the total volume of international payments with a share of 2.3% (for comparison: in January 2020 it was eighth with a share of 1.1%). However, the most universal settlement currencies remain the US

[5] Calculated by the authors based on BIS database. URL: https://stats.bis.org (accessed on 12.04.2022).

[6] Calculated by the authors based on World Bank database. URL: https://databank.worldbank.org/source/world-development-indicators# (accessed on 01.08.2022).

[7] Calculated by the authors based on IMF database. URL: https://data.imf.org/?sk=E 6A5F467-C 14B-4AA8–9F6D-5A09EC 4E 62A4 (accessed on 29.07.2022).

[8] Calculated by the authors based on World Bank database. URL: https://databank.worldbank.org/source/world-development-indicators# (accessed on 04.08.2022).

dollar and the euro, which account for 80.5% of all international payments.[9]

In terms of total global payments, according to SWIFT,[10] in January 2022, the combined share of the US dollar and the euro accounted for over ¾ of all payments, although the combined population living in the US and the euro area is only 8.7% the population of the earth.[11] At the same time, the yuan ranked fourth in terms of share after the leading world currencies with a share of 3.2% (for comparison: in January 2020, it was sixth with a share of 1.7%), although almost 18.2% of the world's population lives in China, and the Indian rupee was not included in the twenty leading world currencies, although almost 17.8% of the world's population lives in India.[12]

The debt market is also asymmetric [21, p. 264]. The combined share of the US, UK, and euro area countries accounts for about 54% of global external debt (9.5% of the world's population), while China, India, Indonesia, Brazil, and Russia, whose combined population exceeds 44% of the world's population, account for only 5.2%. Almost 88% of the world's external debt falls on just 20 countries of the world.[13]

As part of the study, the authors analyzed the key development indicators of the twenty largest countries in the world in terms of GDP in order to identify the degree of dissymmetrization of the GFM. The results indicate that, for example, in terms of the size of the monetary aggregate M2, which is the money supply in the national definition,[14] China is the absolute leader, the money supply of which exceeds the money supply of the United States following it by almost 1.8 times, and the money supply ranked third Japan — 4.2 times.

The highest monetization ratio (227.8%) is in the Chinese economy, which, apparently, is one of the factors providing rapid economic growth. It is worth noting that the high level of monetization of the Chinese economy is not accompanied by an increase in inflation — over the past five years, the maximum annual inflation rate in the country did not exceed 2.9% (2019), and in 2021 inflation was only 1%.[15] In second place is Japan (180.1%), in third is South Korea (161.5%), in fourth is Switzerland (140.4%), and in fifth is the UK (124.7%). The United States was in tenth place with 95.1%, and Russia was in the fifteenth (48.6%).

China is the leader in terms of official international reserves. Its official international reserves are more than five times that of the US. In terms of "Total Official Reserves in Months of Imports", Saudi Arabia ranks first, outperforming the United States by more than 14 times. Russia is in third place, and China is in sixth place (slightly behind Brazil).

At the end of 2020, the maximum net inflow of foreign direct investment (FDI) as a percentage of GDP was noted in Germany (2.93%), Mexico was in second place (2.89%), Spain was in third (2.63%), on the fourth — Brazil (2.62%), on the fifth — Indonesia (1.81%). In 2020, three G20 countries saw a net outflow of FDI — Switzerland (−34.21% of GDP), the Netherlands (−16.34% of GDP), and Italy (−1.17% of GDP).

An analysis of the current account of the balance of payments shows that in 2021, only thirteen of the top 20 largest economies in the world had surpluses, ranging from $ 287.57 billion for Germany to $ 0.45 billion for Mexico. China ranked second in this ranking with $ 277.15 billion. In addition to the countries mentioned, current account

[9] Official website of SWIFT. URL: https://www.swift.com (accessed on 13.04.2022).

[10] Official website of SWIFT. URL: https://www.swift.com (accessed on 13.04.2022).

[11] Calculated by the authors based on World Bank database. URL: https://databank.worldbank.org/ (accessed on 12.04.2022).

[12] Ibid.

[13] Ibid.

[14] Official website of Bank of Russia. URL: https://cbr.ru/statistics/macro_itm/dkfs/monetary_agg/ (accessed on 13.04.2022).

[15] World Bank database. URL: https://databank.worldbank.org/ (accessed on 12.04.2022).

surpluses are recorded in Japan, Italy, Canada, South Korea, Russia, Australia, Spain, the Netherlands, Saudi Arabia, and Switzerland. The United States has the largest negative current account balance (–$ 796.12 billion), followed by the UK (–$ 104.62 billion), France (–$ 48.99 billion), India (–$ 30.37 billion), Turkey (–$ 19.35 billion), Brazil (–$ 8.53 billion) and Indonesia (–$ 3.11 billion).

Thus, the results obtained allow us to conclude that the main indicators of the economic development of the twenty largest countries in the world are absolutely asymmetric, there are practically no stable patterns that determine the country's position in the world ranking.

IMPACT OF REGULATION ON ASYMMETRIES OF MODERN GFM

The existence of regulatory arbitrage, the meaning of which is the use of special strategies by market participants to avoid severe pressure from national regulators (in particular, by transferring trade abroad or transferring the activities of financial institutions to other jurisdictions) is one of the exogenous factors that increase the asymmetry of the GFM. Such arbitrage can provoke regulatory competition between different jurisdictions, which may respond to the movement of financial services (or the threat of movement) by relaxing their regulatory standards. Although competition between different countries in the field of regulation has certain advantages in the form of the search for effective regulatory standards, however, a significant risk lies in the fact that countries lower their standards solely for the sake of attracting business and thereby have a negative impact not only at the GFM, undermining global financial stability [22], but also on the world economy as a whole, contributing to the deepening of existing imbalances and contradictions.

After the 2008–2009 crisis experts drew attention to the need for stricter regulation at the GFM of the activities of not only banks, which turned out to be the most vulnerable market participants, but also other organizations that also have a significant impact on ensuring financial stability [23]. Along with this, an increase in political influence on the financial and economic system (especially in developing countries) was noted. The allocation of public investment resources was carried out extremely asymmetrically (funds were received mainly by companies that have formal or informal relations with government officials). As a result, the efficiency of investments turned out to be at a low level, which negatively affected the economic development of countries [24].

According to some researchers [25], the lack of an adequate level of standardization of the operations carried out, as well as the products and services offered by the GFM, reduces the efficiency of its activities, weakens competition between participants, and hinders the introduction of innovative financial instruments. The main reason is the underdevelopment of institutions that set appropriate performance standards for the GFM (unlike, for example, the electronic and electrical industries, healthcare, etc.).

At the GFM, standardization is most developed in the field of messaging about completed trade transactions, payments, and settlements (the so-called transactional standards). Standardization is not sufficiently developed in the area of accounting for financial risks by individual corporations when aggregating the necessary data and existing risks. This poses challenges with the need to comply with new post-crisis regulatory requirements for OTC trading collection and reporting, data aggregation, and risk assessment, as well as compliance with the banking and exchange Know Your Customer (KYC) counterparty identification procedure.

In order to solve existing problems in the field of standardization of the GFM, a report prepared by a group of scientists for the UK government proposes to create a supranational body for the management of standards for the GFM, which will provide oversight of both the compliance with established standards and compliance with the basic principles of financial activity [25, p. 72]. At the same time, it is noted that the creation of such a body will only make sense if it can help improve the efficiency of practical activities at the GFM. In the near future, the main focus is proposed to be on establishing an informal dialogue between regulators and financial market participants in order to discuss various problems related to setting standards for the GFM. It is obvious that such coordination will not solve the key problems of the functioning of the GFM, but it can help to smooth out the existing contradictions and imbalances.

The asymmetric development of the GFM can cause a new financial crisis if funds are excessively concentrated in a certain market segment, a certain geographical region, or a certain type of financial asset. In this regard, after the crisis of 2008–2009, the national central banks tightened control over operations in the financial market. For example, in the United States and the European Union (EU), the largest banks are required to periodically report on the largest loans issued by them, and in India, banks are required to provide information on the 20 largest borrowers every month [26]. Based on the analysis of information provided by banks, the central bank determines the degree of the aggregate credit risk of the national banking sector.

The asymmetric development of the GFM is also intensifying as a result of the complexity of its infrastructure and the emergence of new cross-sectoral and transnational financial products and instruments. This requires new approaches to regulating operations at the GFM and overseeing the activities of its participants and their compliance with established market rules. After the global crisis of 2008–2009, a number of international organizations (Group of 20, OECD, Financial Stability Board, and BIS) have established stricter rules and regulations for the GFM, but it has not been possible to significantly strengthen the supervision of the GFM participants, since these functions are carried out at the national, and not at the international level. Recently, the EU has been discussing the issue of changing the existing system of supervision over the largest exchanges, central counterparties, and depositories by establishing direct centralized supervision by a specially authorized body [27, p. 23].

A number of experts in their studies note the strengthening of the asymmetry of the GFM in connection with the use of new high-tech financial instruments. In particular, a significant asymmetry was revealed in the segment of virtual financial assets associated with the use of bitcoin [28]. S. Glaz'ev drew attention to the fact that the modern information technology system of the financial market operates on automatic algorithms performed by robots, whose operations are programmed according to certain rules. The application of these rules is strict, generating periodic financial market failures [29, p. 7].

One of the drivers of the asymmetric development of the GFM in recent years is its increased fragmentation. It is based on various reasons: natural barriers and disagreements (for example, investor preferences regarding the object and type of investments), differences in the level of development of financial systems (for example, the depth and volume of capital markets), the presence or absence of synchronization of financial cycles, differences in taxation systems and the level of competition in individual countries. Market fragmentation can also arise from differences in financial regulation and supervision. Moreover, the reason for this may be not only national or regional rules used to regulate international activities, but also different approaches to the use of international principles and standards in individual countries or their inconsistent and contradictory application by national financial regulatory and supervisory authorities. As a result, bona fide market participants may opt out of cross-border activities in order to avoid the associated increase in costs and excessive supervisory pressure.

Fragmentation can not only exacerbate the asymmetry in the development of the GFM but also increase financial instability. At the same time, according to some experts, a compromise can be found between market fragmentation and financial stability. To do this, it is necessary to assess the overall social costs and benefits of fragmentation and understand whether the existing market fragmentation is capable of increasing systemic risk to a critical level. Then, an action plan should be developed that can reduce fragmentation and increase financial stability. The final stage is the choice of the most effective instrument of state intervention in the functioning of the market [30]. On the other hand, according to BIS experts [31, p. 3], the development of financial markets in developing countries is hampered by excessive state control, as well as the lack of the necessary legal framework and an effective regulatory system.

Although over the past thirty years a differentiated approach to the specialized management of global finance has brought certain results in terms of their greater control and manageability, however, along with this, there has been an increase and expansion of the shadow banking business. Separation of financial regulation without linking it with other segments of the world economy has led to an increase in the desire of financial intermediaries to make a profit at any cost (including through the use of the imperfection of the management mechanisms of the GFM). As a result, at the supranational level, it was not possible to achieve a greater balance of the world economy, since the management and regulation of the global financial system should be synchronized with the management and regulation of world trade and investment flows.

Some experts directly point out the fallacy of the idea that the international financial order can exist separately from the world monetary, trade, and investment order and be regulated by specific standards specially developed by the relevant supranational institutions represented by the Basel Committee on Banking Supervision and the Financial Stability Board [32, p. 3]. The authors share this point of view, because, as noted earlier, they consider the GFM to be a serving element of the world economic system. However, this does not mean that it is impossible to smooth out existing imbalances and contradictions with the help of financial regulation measures. At the same time, as a result of insufficiently effective management by various regulators, the asymmetry in the development of the GFM may increase.

CONCLUSION

The analysis of the GFM carried out by the authors made it possible to theoretically substantiate the conclusion about the asymmetry of its development as an organic phenomenon, which, on the one hand, becomes a serious obstacle to the functioning and progressive development of the world economy, and on the other hand, is the driving force behind this development. The asymmetry of GFM development is due to a wide range of endogenous and exogenous causes. Endogenous reasons inherent in the very nature of intercountry relations are primarily associated with significant regional differences that characterize different countries of the world, forcing them to enter into international trade, and thereby breaking economic isolation, which, in turn, leads to dissymmetrization. Resource provision, climate, territory, population, customs, and traditions, historical features have a significant impact on the level of economic development of individual countries, which determines their role and place in the world economy.

Since economic isolation is likely to slow down development and lag behind other countries, the negative consequences of endogenous asymmetry can be partially compensated only by building a system of fair partnerships between countries that take into account, to the maximum extent, the national interests of all participants. The complete elimination of endogenous asymmetries is not possible, which under certain conditions can be considered as a positive factor that disrupts the economic balance and thus compels the search for ways and solutions aimed at further development. There are many examples in world economic history when limited resources forced countries to make technological breakthroughs in order to ensure the transition of the national economy to a qualitatively new level.

Exogenous can be considered a wide range of factors related to the foundations of the historically established world order, the peculiarities of the regulation of international financial and economic relations in general, and the GFM in particular. The destruction of the bipolar world that emerged after the Second World War (the US and its allies vs the USSR and its allies) led to the creation of a unipolar IMFS dominated by one national currency. The liberalization of the economy in the context of the emerging unipolar world order means the unconditional submission of all participants to the rules established by the main world power, the role of which is played by the United States. In return, the United States took on the responsibility of maintaining world stability, which they were unable to cope with, which became even more obvious after the 2008–2009 crisis. The model of the world order actively promoted by the United States temporarily strengthened its position due to the collapse of the USSR, since the countries of the collective West in the 1990s gained simplified access to new markets and sources of resources, and the former socialist states were forced to accept the rules imposed on them.

If after the Second World War the United States was the most powerful state in the world, which only the USSR together with the allied countries could compete with, now the situation has changed dramatically: the economic influence of the United States and other developed countries is steadily weakening, and the role of developing countries, on the contrary, is gradually increasing. It is becoming more obvious that the current model of the world order is outdated and has become not only a deterrent but also a real threat to its existence. The exogenous asymmetry due to the peculiarities of the historically established world order, in our opinion, is destructive for all participants in the world economic system, including those whose interests should be protected.

The special military operation conducted by Russia in Ukraine increases the risk of violating the stability of the existing IMFS and may further increase the asymmetry of the further development of the GFM. Reassessment of existing risks could exacerbate problems that arose during the COVID-19 pandemic and lead to a sharp decline in financial asset prices. According to the IMF experts, exogenous factors of increasing asymmetry in the GFM can be inflationary pressure due to commodity price fluctuations, direct and indirect risks of banks and non-bank financial intermediaries, commodity market failures, increased counterparty risks, reduced market liquidity, difficulties with funding, as well as cyber-attacks that negatively affect the stability of the GFM participants.[16] Although the IMFS was able to cope with the consequences of the global crisis of 2008–2009 and the coronavirus pandemic, future shocks could be more devastating.

Asymmetries will also widen as countries face worsening external financing conditions due to growing geopolitical uncertainty, which could lead to a reduction in portfolio

[16] Global Financial Stability Report. April 2022. International Monetary Fund. URL: https://www.imf.org/en/Publications/GFSR/Issues/2022/04/19/global-financial-stability-report-april-2022 (accessed on 02.07.2022).

investment inflows. To contain inflation, many countries will have to raise interest rates well above the usual average. Such actions may complicate and slow down the recovery of the global economy after the pandemic and a new round of crisis caused by the active sanctions policy.

In the short term, we can expect a further increase in fragmentation of the GFM's debt segment based on currency diversification, which could lead to a decrease in the global influence of the US dollar. In addition, due to the possible introduction of central bank digital currencies in different countries, the fragmentation of the global payment system may increase. Taking into account the growing differences in the world between individual countries and groups of countries, the consolidation of efforts to solve existing problems on the basis of multilateral cooperation at this stage seems unlikely.

It seems that the problem of the asymmetric development of the GFM will continue to remain relevant and acute and will be perceived by market participants as a normal phenomenon that must be taken into account, and different countries will respond to manifestations of the asymmetry of the GFM individually, smoothing out the contradictions and imbalances that arise with the help of tools existing in their disposal.

In order to overcome the exogenous asymmetry, the world is likely to be divided into several blocks with the creation of internal payment systems that will build financial and economic relations in a new way and interact with each other in the interests of their participants, and the issues of creating reserve instruments, apparently, will be decided by the associations themselves, depending on the composition of their members. This trend has already become irreversible, since even the IMF report published in July 2022 noted that in the medium term, a serious risk is the fragmentation of the world economy into geopolitical blocs with clearly distinguishable technological standards, cross-border payment systems, and reserve currencies.[17]

The authors express the hope that the results of the analysis carried out can become the basis for future scientific research within the framework of this topic, and the author's calculations and conclusions can be used in educational activities related to the world economy and world finance.

[17] Official website of information agency Rosbizneskonsalting. URL: https://www.rbc.ru/economics/29/07/2022/62e281919a7947ba48758474 (accessed on 29.07.2022).

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