GLOBAL TRENDS IN ECONOMIC DEVELOPMENT IN THE POST-PANDEMIC PERIOD

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Abstract
In the spring of 2020, modern societies were not ready for a drastic change in their usual way of life. The COVID-19 pandemic has made changes not only in people's lives but also in the economic, social, and political life of all states. The global economy was stopped for the first time in history to save human lives. The pandemic has recorded a worldwide value-worldview shift in the consciousness of elites and societies, and a new consensus has been recorded around the world on the need for a state as such at the basic level. The general opinion has developed in such a way that the role of the state in countering natural disasters of such a scale as a pandemic has become indisputable. The coronavirus pandemic is ending in 2023 and soon will be history, unlike its consequences, which the entire world community will have to deal with. That is not just a matter of falling GDP. Coronavirus consequences promise to be noticeable in the fundamental institutions of society. Big changes can appear in such concepts as the state, international relations, state budget, state border, and even the truth. The COVID-19 pandemic triggered geopolitical confrontations, vaccine wars, and actions of international institutions, again raising the question of the need for a globalization policy. The article attempts to comprehend the COVID-19 pandemic consequences in terms of the economic component and from the point of view of projecting them onto social processes in society.
Keywords*: COVID-19 pandemic, economic development, economic security, globalization, global value chains, fragmentation of the economy*

FOREWORD

Before all, we must say that the previous years and this year were among the most difficult for countries and the world economy. The COVID-19 pandemic has taken over the world, and the coronavirus has infected more than 67 million people, affected more than 80 percent of jobs worldwide, and locked millions of people in quarantines. [1] Along with the pandemic, many wars were fought (e.g., Syria, Afghanistan, Israel - Lebanon, -Syria, -Iran, etc.). For different reasons, there were mass demonstrations across the USA and France, in London, Hong Kong, Beijing, Shanghai, etc. The latest challenge, which has been going on for a year, is the so-called "special intervention" by the Russian Federation in Ukraine. The most developed countries, members of the NATO pact, were prepared and immediately intervened in the conflict. At the moment of this writing, no one knows when the war will end. It had and still has exceptional importance for the world and the economy. While it is ongoing, a new disaster has occurred, the current series of earthquakes in Turkey and Syria with previous and subsequent earthquakes in this region and Europe. The extreme cold weather has gripped the US. Also, weather disasters (heavy rains and very violent winds) have affected parts of Europe. Each of the disasters brought damages measured in billions of EUR. There is no doubt that all the above affects the world economy. In this paper, we will look at the world economy through the filter of the COVID-19 pandemic, ignoring the other previously listed factors, noting that a broader analysis was done and published in [2].

INTRODUCTION

Each time has its crises, either local or global. Global ones are visible to everyone and remembered longer. In this paper, we will pay attention to the crisis that arose because of the COVID-19 pandemic. We dealt with global crises, their causes and consequences, ways of the world community development, and issues of wars and sanctions as early as 2016 in the paper [3]. In our opinion, highly simplified, the crucial causes of crises lie in man and his desire to achieve personal well-being (and more than that) with as little work as possible and, if possible, to say politely, take from others what he thinks he needs. In that sense, we can look at globalization but also the collapse of globalization. Globalization made a market larger and divided labor possible. Several countries managed it better and progressed rapidly, while other previously powerful countries became dependent and felt threatened to lose their domination. In addition to these purely human traits and actions, there are also causes that cannot be or, from a certain point on, cannot be influenced by humans1[1]. Such is the case with the still unfinished coronavirus pandemic.

The most tangible consequences of the pandemic, for sure, manifested themselves in the socio-economic sphere, affecting the quality of life of almost the entire population of the globe. A mass-population decline, the bankruptcy of enterprises, and the disruption of logistics links are only part of the modern reality.

In 2023, national economies begin to return to the pre-pandemic level. As the pandemic has unevenly impacted different countries, the pace of economic recovery in them varies significantly.

In 2020, the global economy shrank by 4.3%. In some countries, things were much worse than in others. For example, the UK economy experienced the worst recession in the last 300 years, shrinking by almost 10%. The impact on the labor market was unprecedented — ten times worse than during the global financial crisis of 2009. People lost 114 million jobs worldwide in 2020. [4]

The pandemic has had an unprecedented impact on international economic relations. Various factors of global value chains (GVC) transformation in the post-bubble world are evaluation subjects now, and their specifics are subjects of discussion. Neither the previous experience of the reaction of global chains to global shocks nor expert assessments regarding the impact of the COVID-19 pandemic give unambiguous ideas about in which direction and how exactly the GVCs will change.

ANALYSIS

The COVID-19 pandemic and related restrictions on the movement of people and goods between countries have caused a discussion in the scientific and business community about the prospects for the global value chain transformation. At the same time, the experts divided their opinions into two opposite groups.

Some experts noted the increasing need for a policy of deglobalization, namely, breaking production chains, reducing offshoring, and returning enterprises (jobs) to the country. They emphasized that the era of transferring production to other jurisdictions was over. At the same time, they do not place excessive emphasis on efficiency. The concern for lost jobs began to manifest itself again. The pandemic has exacerbated the problem of dependence of several Western countries on imports of essential medicines, medical devices, and personal protective

[1] There are still discussions about how the coronavirus and the pandemic started.

equipment. Moreover, the desire to reduce import dependence quickly spreads to other sectors [5] [6].

Other experts, on the contrary, explained the unrealistic nature of the natural transformation of global chains. They noted that a reversal, from the global integration of the business to chains, can be achieved only with the help of public policy, which is fraught with long-term costs for economic growth and prosperity. This is especially true in developing countries. There, global value chains play a significant role in raising income, better job creation, and reducing poverty. At the same time, one can note that the independence of production from other countries will not increase the reliability of production and is unlikely to reduce systemic risks [7] [8].

The analysis of the paradigm of global value chains made it possible to identify several factors whose influence will set the vector of transformation of international cooperation in the future (Table 1).

Table 1. Factors influencing the transformation of value chains after the COVID-19 pandemic

Factor	Degree of impact on global value chains	
	positive	negative
International trade costs	The development of digital services reduces transaction costs	Rising costs in the process of expanding business and establishing new business relationships
Volatility within chains	An economy with localized ties is less dependent on external shocks	International trade can absorb risk and volatility
Relationship diversification	A diversified network of suppliers is more vulnerable to shocks but allows a company to switch between suppliers and win in the long term	Trade is concentrated on suppliers

Costs of conducting international trade.

The pandemic has accelerated the introduction of digital services and platforms, including at customs. That will positively impact reducing the cost and transaction costs of regulation and customs operations. Also, this will positively impact the decision of companies to enter foreign markets. Customs and tariff regulations often are the main barriers to exports and imports. However, the pandemic has limited opportunities for travel and personal-to-person communication, although personal interaction is a significant factor in international trade. A direct connection between the possibility of face-to-face communication is explained from the standpoint of the theory of incomplete contracts when direct interaction makes it possible to clarify and specify the contract, as well as from the point of view of theories about the external effects of knowledge exchange. Hence, we can expect a negative impact of restrictions on business travel on trade in differentiated goods.

Volatility within chains.

From one point of view, one can argue that high localization of production and orientation to own market make the economy less susceptible to external shocks. At the same time, the weaker the links with external counterparties and the more homogeneous the product traded in chains, the weaker the shocks are transmitted within the chain. That may lead to a "simplification" of the complexity of the chains and the growth of national stages in the GVCs. On the other hand, global value chains are characterized by stronger inter-firm ties, which allows them to be more resistant to external shocks, adapt to external conditions, and recover faster in the post-crisis period.

Diversification of links in the chain.

The accumulated experience of previous global shocks (including the earthquake in Japan in 2011 and the SARS pandemic 2002-2004) indicates that the long–term relationships and a diversified network of suppliers and buyers contribute to a faster recovery of the company. At the same time, even those firms that previously worked within the historically established framework, in other words, traditional ties, also sought to diversify partnerships after the crisis (for example, Toyota's experience in diversifying beyond traditional ties within large industrial groups). However, the prospects for diversification and the search for new suppliers and buyers may be hindered to a certain extent by the level of product specificity and investment requirements for building new logistics routes and distribution networks.

The analysis showed that in the post-pandemic period, the main task of political and business elites should be to increase the competitiveness of manufacturing companies in the global market and increase their readiness to integrate into existing chains. Also, one of the main ways to reduce the effects of global shocks is to increase the share of industries with a high level of added value at the national level, which will minimize the dependence of manufacturers on a range of goods critically needed by industry from foreign suppliers in some industries.

A significant issue is the digital transformation of business and increasing investment of the service sector in the national stages of the chains (special programs created to support the technological modernization of exporters focused on product and process innovations, including providing advanced training of employees). Such measures will increase the complexity of the products produced by companies and increase their competitiveness in global markets, which, in turn, will ensure more stable inter-firm relations and higher readiness for global shocks.

However, as was noted earlier, the issue of globalization is causing discussions both in the scientific and business community.

The economic growth paradigm should be based primarily on domestic demand and the need to make more active use of the advantages of the national domestic market. The savings of the population should bring good investment results.

In Germany, it is 70.8%, in the USA – 19.7%, in Japan – 28% and in China – 40%. [9]. The economy's dependence on its major counterparties threatens its sustainability.

Automotive industry

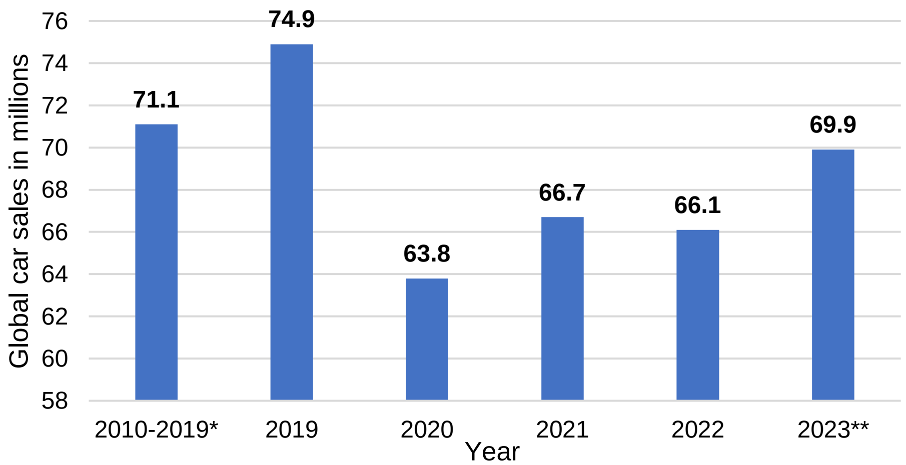

Figure 1 Number of cars sold worldwide from 2010 to 2022, with a 2023 forecast [10]

The pandemic has hit all branches of the economy hard. After tourism and passenger air transport, the pandemic hit hardest the automotive industry. A lockdown has made it harder for people to decide to buy new vehicles. The chart in figure 1 shows the change in the number of new vehicles sold worldwide from 2010 to 2023. Value for the period 2010-2019 represents annual averages. For 2022 the value represents an estimation, and for 2023 is given a forecast. All figures refer to new vehicle sales. In 2020, the automotive industry recorded a 14.8% drop in vehicle sales. The situation with selling began to improve in 2021, but due to the reduced production of chips, the automotive industry could not complete the vehicles. Customers were forced to wait for them for months, even years.

China is one of the main suppliers in the automotive industry with a share of more than 80%. [11, p. 16] China's car sales plunged by 18% in January 2020. [11, p. 7] The China Automobile Association estimated that sales in the first two months of 2020 could drop by 40 percent or more compared to the same period in 2019. [12]

The Economist Intelligence Unit surveyed the automotive sector by querying 175 supply chain managers in February and March 2021. In the report released in August 2021, Yen Nee Lee found that around 51.7% of respondents said disruptions to supply chains were "very significant". [13]

Electronics

The automotive industry is a large consumer of electronic components. The share of electronics in the price of a vehicle is increasing every day. Figure 2 can serve as an illustration.

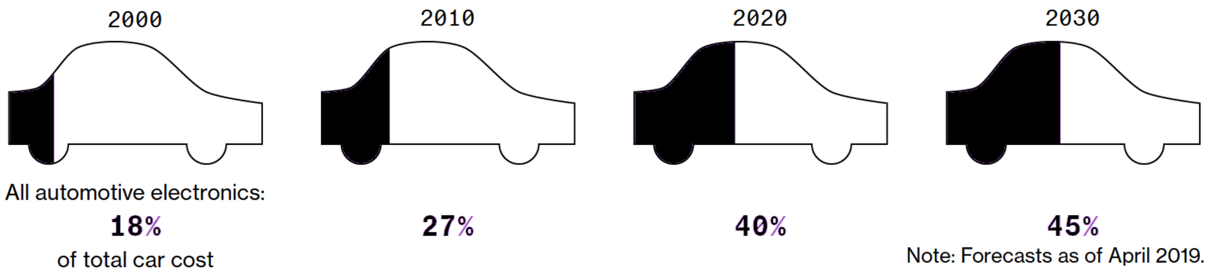

Figure 2 The share of electronics in the price of a vehicle [14]

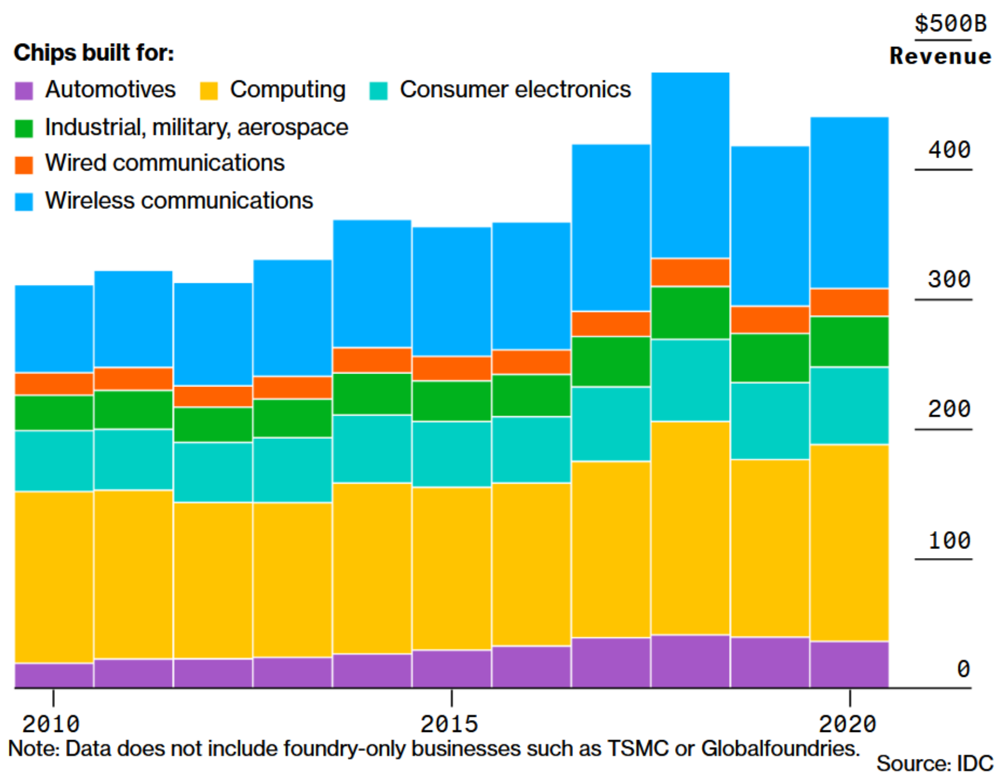

Figure 3. Sales of semiconductors have grown over the past decade [14]

At the end of 2020, manufacturers in the automotive industry faced a serious shortage of chips, so many tried to maintain production facilities with a large reduction in production in the hope that the crisis would pass quickly. However, it lasted for months, and producers started to produce some models with poorer equipment. The crisis came at a time when governments promoted electric vehicles intensively. Such vehicles require a high level of electronics.

The automotive industry is a significant electronics consumer, but the computing and communications industries are significantly larger. The value of the market of electronic products in the previous decade is shown in Figure 3.

The demand for chips rapidly grows in recent years, especially since March 2017. At the same time, due to insufficiently built capacities, the waiting time for the delivery of components has also grown. The maximum waiting time for delivery was in July 2018, when the average waiting time for delivery was more than 14 weeks. Since then, it has started to shorten so that by the start of the pandemic, it was 12.2 weeks. At the beginning of the pandemic, there was a drop in production in all sectors, including the chip production sector. The wait for chip shipments rose again, reaching 13.2 weeks by December 2020. The new economy start caused a sudden increase in demand, but there was no one to produce the chips, so the wait for delivery in March 2021increased to 16 weeks with a tendency to increase further. The most sophisticated devices manufacturers generally do not have their full productions but are oriented towards outsourcing. Asia is a major producer of advanced electronic components, primarily TSMC and Samsung. The two largest Asian producers do not have sufficient capacity to meet world demand. The situation caused by pandemic has triggered many countries to start working on their chip production, but governments have no real options to do anything about meeting the current needs. It takes years of work and previous experience to build, run and ensure the reliable operation of factories in this area.

Recently, several major players on the world stage have begun to re-examine their approaches to economic policy. Sanctions, trade wars, and geopolitical turbulence are forcing the countries' economies to look for new tools to reduce the risks of globalization.

The COVID-19 pandemic acted as a kind of trigger for this process. Some scientists are confident that the process of "deglobalization" began even before the pandemic and will continue in the next decade. The first and most striking example of the beginning of the era of fragmentation of the global economy was the withdrawal of the United Kingdom from the European Union in 2016, and formally on January 31st, 2020, as well as trade wars between the two largest economies in the world — the United States and China. That resulted in several mutual protectionist measures adopted and countermeasures in trade in 2018. According to Global Trade Alert [15], during the past 13 years, the number of trade restrictions imposed by countries, especially in high-tech sectors related to national security or strategic competition, has increased more than fivefold. (See figure 4)

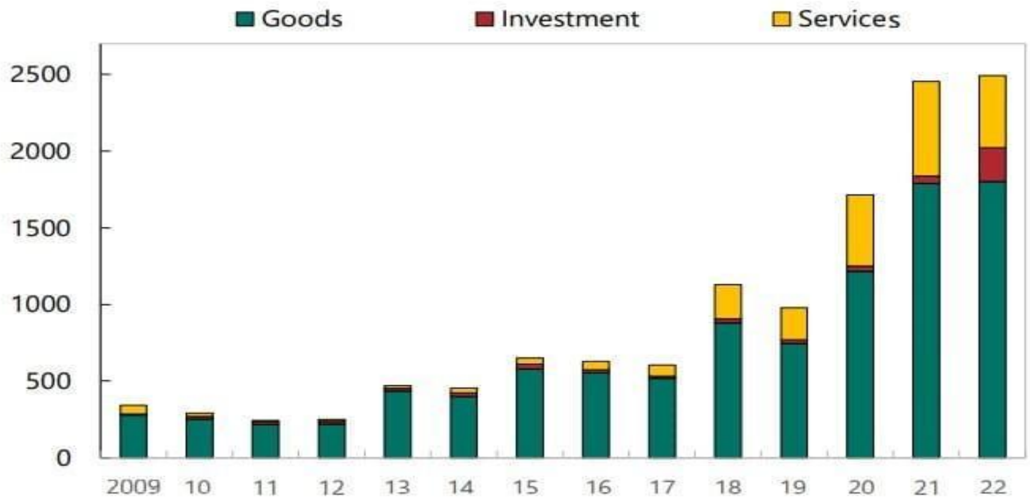

Figure 4. The trade restrictions imposed worldwide, 2009-2022 [15]

The events of 2022 accelerated and aggravated this process, giving it an additional impetus.

The trend of applying restrictive measures to ensure national security was fully manifested in 2020. IMF reports on exchange agreements and foreign exchange restrictions applied by countries clearly illustrate the intercountry confrontation in matters of trade, production, and finance.

An example is the US Inflation Reduction Act. It contains provisions for creating incentives for domestic producers. Similar is with the European law on chips. It provides support for semiconductor technology producers in the EU. Such measures include the Chinese government-supported “Made in China 2025” subsidy program, as well as the transition from fast-copying imitation practices (“Made in China”) to the widespread production of original products (“Made in China”), aimed at increasing the country's competitiveness. in high-tech manufacturing.

At present, it is almost impossible to predict the development of the geopolitical situation, but IMF experts identify several risks of geo-economic fragmentation. [16] The reasons are:

1. Increasing burden on the international monetary system and the global financial safety net.
   As a result of sanctions imposed on Russia, there has been an accelerated transition to cross-border trade in national currencies and a decrease in demand for the US dollar for transactions.
   But, according to the IMF, any significant shift towards the emergence of new world reserve currencies is possible only if there are viable alternatives, which are not currently available. Although recently the share of the US dollar in world foreign exchange reserves has been gradually decreasing, and the share of non-traditional reserve currencies is growing, the latter remains low to date.
2. Formation of conditions for financial regionalization and fragmentation of the global payment system.
   After being disconnected from SWIFT in 2022, Russia switched to its national counterpart, the Fast Payment System (FPS). [17] Other countries may also begin to reconsider their attitude towards international financial infrastructure due to fears of sanctions, partial denomination of trade and financial transactions in other currencies, or other geopolitical considerations. As a result, new parallel systems may appear that lack interoperability, leading to higher transaction costs and other inefficient activities. Reliable alternatives' development, implementation, and control will bring additional costs.
3. Increasing macroeconomic instability, deepening economic crises, and increased pressure on national reserves.
4. Because of the risk of fragmentation, countries may try to diversify traditional reserve assets, but at least in the transition period, diversification will increase financial volatility. Digitalization can accelerate that process.

Estimates of possible financial damage from geo-economic fragmentation by different groups of experts from the IMF differ greatly and depend on the depth of penetration of this process into the world economy.

Under limited fragmentation scenarios, global economic losses could be as high as 0.2%. According to the most pessimistic forecasts, its losses due to fragmentation, which includes technological separation, will reach 7%, and in some countries 8-12%. [16]

CONCLUSIONS

The COVID-19 pandemic and current geopolitical split will have huge consequences for the capital and investment market and most countries' economies. It seems that globalization (economic, political, and social), which lasted for decades, ends now. Liberal meritocratic capitalism is in a severe crisis because of new state restrictions and growing inequality within states. If it does not solve these, it risks the development direction changing. There are two alternatives, moving towards socialism and convergence with political capitalism. The second alternative is currently more likely.

Experts agree that we can forget about the world of the early 2000s. The differences and confrontations are evident and too strong.

Many politicians and economists now perceive globalization as a relic and a risk factor for national security.

It is difficult, if not impossible, to defend one's economic interests within the existing geo-economic structure of the world. That means the formation of new regional blocs and integration strengthening within the existing ones. Geopolitical tensions will decrease over time, but it is also significant when this happens. The basis for the formation of future world geo-economic structures depends on this.

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