



საქართველოს სტრატეგიისა და საერთაშორისო ურთიერთობების კვლევის ფონდი  
GEORGIAN FOUNDATION FOR STRATEGIC AND INTERNATIONAL STUDIES

# MAIN ECONOMIC CHALLENGES OF PANDEMIT

VLADIMER PAPAVA

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## **MAIN ECONOMIC CHALLENGES OF PANDEXIT**

**VLADIMER PAPAVA**

**2022**

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## Introduction

Since the spring of 2020, the global COVID-19 pandemic has engulfed the world (WHO 2020). As the coronavirus spreads through direct contact with people, individual governments have been forced to lockdown various sectors of the economy to limit the impact (IMF 2020b). The lockdown economy, in turn, hastened the global economic crisis (Baldwin and di Mauro 2020; Roach 2020b).

Unlike 2020, different types of coronavirus vaccines were developed by 2021, making it possible to start the vaccination process worldwide. It is noteworthy that the process of mass vaccination has met with numerous obstacles around the world. In particular, there has been the unfair distribution of vaccines between countries, the restriction of universal access to vaccines, an anti-vaccine movement, etc. (e.g., El-Erian 2021c; Malpass 2021; Papava 2020c, 2021d; Woods 2021a). Nevertheless, the vaccination process has raised real hopes of ending the COVID-19 pandemic.

The real possibility of eliminating the COVID-19 pandemic has given rise to a new term – “pandexit” – which has evolved along with other well-known terms such as – Grexit, Italexit, Frexit and Brexit. The first letters of the English names for Greece, Italy, France and the United Kingdom were supplemented with the suffix “exit” to denote the process each of country leaving the EU (as a matter of fact, only Brexit took place). Consequently, “pandexit” means leaving the pandemic or the end of the pandemic (Davies 2021).

It is noteworthy that before the emergence of the term “pandexit,” there was an attempt to create a phrase that would signify the exit from the crisis or its end. This has created a new term – “crisexit” – following the same principles described above (GEAB 2017; Larbi 2019).

Even at the beginning of the COVID-19 pandemic, it was important to not only study the economic difficulties caused by the pandemic but also to understand the post-pandemic period; that is, to anticipate the problems facing the world after the pandemic (e.g., Aptsiauri 2020; Archvadze 2020b; Auzan 2020; Gaganidze 2020; Kovzanadze 2020; Rodrik 2020; Schwab and Malleret 2021; Shengelia and Kirkitadze 2020; Zakaria 2020). Naturally, the pandexit challenges engulf all areas of human life. Thus, for example, during the COVID-19 pandemic, authoritarian tendencies have prevailed in some countries (Woods 2021b), making these one of the major challenges.

The purpose of this study is to identify the main economic challenges of the pandemic which will help individuals as well as governments and international organizations to better understand the problems of the post-pandemic period.

### **On the Economic Crisis Caused by the COVID-19 Pandemic**

Due to its global scale, the economic crisis caused by the COVID-19 pandemic has been in the spotlight of economists from the very beginning. Moreover, a separate term was also coined for the field of studying the impact of the coronavirus on the economy. This term is “coronomics” which is obtained by combining the words “corona” and “economics” (de Alwis 2020). Also combining the same two terms, a slightly different word – “coronanomics” – was later created (Eichengreen 2020).

Using the term “coronomics,” the economic crisis caused by the COVID-19 pandemic was called the “coronomic crisis” (Benashvili 2020; Charaia 2020; Mekvabishvili 2020; Papava 2020a; Papava and Charaia 2020).

It is clear that the coronomic crisis did not arise from within the economy – it is the result of the weakness of medicine against the coronavirus during which, as noted above, it became necessary to limit direct contact between people by the lockdown of the operation of various sectors of the economy. Therefore, the cause of the coronomic crisis is exogenous and not endogenous from which it logically follows that the end of this crisis depends largely on medicine’s ability to defeat the coronavirus. Thus, during the COVID-19 pandemic, the economy became a hostage of medicine (Papava 2020a).

As the coronomic crisis was not born within the economy, we cannot attribute it to the group of classic or typical economic crises. It is clear that the coronomic crisis is not just an atypical economic crisis (Papava 2020d) but is also unique (Ajili 2020).

It is noteworthy that the direct use of the experience of overcoming a typical economic crisis in order to overcome an atypical economic crisis (Skidelsky 2021), precisely due to the atypical nature of the latter (not to mention their uniqueness), should be applied with some caution.

It is fair to note that the history of mankind is familiar with economic crises caused by various pandemics (Roach 2020a); however, the economic crisis caused by the Spanish flu pandemic in 1918 is most similar to the coronomic crisis (e.g., Bishop 2020; De Santis and Van der Veken 2020; Maas 2020; Ullman 2020). Indeed, both crises are characterized by declining economic

activity, output and population incomes while at the same time there are differences between these crises (Scheidel 2020). In this regard, we can highlight the following moments (Papava and Chkuaseli 2021a, 9-10):

1. The Spanish flu crisis virtually followed the end of World War I which in turn triggered an economic crisis caused by the war-torn economy while the coronomic crisis took place in a completely peaceful environment.
2. Under the Spanish flu pandemic, the world was not as globalized as it was during the economic crisis which is why the supply and value chains began to break down in a globalized economy (Derviř and Strauss 2020).
3. At the beginning of the Spanish flu pandemic, tourism and international transportation were not as developed as they were before the COVID-19 pandemic when it had already reached a global scale and that is why these two sectors of the economy were the hardest hit by the coronomic crisis.

As coronavirus vaccines around the world appeared in 2021 precipitating the vaccination process, restrictions on various areas of economic activity began to gradually subside and some were even lifted. This gave a proper impetus for economic revitalization (O'Neill 2021b). At the same time, under the conditions of insufficient vaccination and as new strains of the virus are appearing, the problem of coronavirus evolution becomes more and more urgent (e.g., DW 2022) which naturally raises questions about whether they will have a devastating effect on the economy (Pazzanese 2021) or, in the best case, the durability of the economic recovery (O'Neill 2021c). In other words, the question of whether it is possible to end the coronomic crisis without a pandexit remains (Papava 2021b).

The answer to this question is not easy in so far no one can more or less realistically foresee the extent to which it is possible to introduce further restrictions on economic activity in the face of the unpredictable formation and the spread of new coronavirus strains. If the situation in public health does not worsen dramatically, then the introduction of new restrictions on economic activity is less likely and we might be able to achieve crisexit in the still ongoing pandexit. However, it can be said with certainty that the pandexit is a necessary precondition for ending the coronomic crisis.

It should be noted that the COVID-19 pandemic has created a number of problems for both the world economy and the economies of individual countries. And the future pandexit is likely to exacerbate these problems and create new challenges.

## **Globalization or Deglobalization?**

As is well known, any pandemic, including COVID-19, is a global phenomenon which has put a reconsideration of the existing views on globalization on the agenda (e.g., Abesadze 2020; Archvadze 2020a; El-Erian 2020; Haass 2020; Mekvabishvili 2020; Rogoff 2020).

It is noteworthy that the COVID-19 pandemic can be qualified as the “price for globalization” (Auzan 2020, 4). And this should not be surprising given that without globalization, the coronavirus disease could not have developed into a pandemic as such.

The unpredictable and rapid spread of the coronavirus revealed that national governments and international organizations (primarily the World Health Organization) were unprepared in the face of COVID-19 pandemic which led to countries making individual decisions in order to limit the spread of the virus. It is noteworthy that Sweden and Belarus refused to introduce restrictions from the very outset and focused on the strategy of acquiring herd immunity.

The uncoordinated action of national governments against the spread of the coronavirus and the passivity of international organizations raised the feeling that the process of deglobalization had begun. This view was further reinforced by the fact that even before the onset of the COVID-19 pandemic, the processes characteristic for deglobalization were initiated by US President Donald Trump (e.g., Sachs 2017) and, of course, also facilitated by Brexit (e.g., O’Rourke 2019).

The uncoordinated actions by national governments have further exacerbated the disruption of global supply and value chains characteristic of deglobalization or, more precisely, isolationism (Derviş and Strauss 2020).

When it comes to isolationism, we must always remember that it not only slows down economic growth as such (Rogoff 2020) but ultimately has a negative impact on society, both socially and politically, and especially in terms of environmental protection (Haass 2020).

Due to the global nature, overcoming the pandemic on the basis of isolationism is in principle impossible (Stiglitz 2020a). On the contrary, it is only through a maximum coordination of measures taken by individual countries that it will be possible to prevail over the COVID-19 pandemic (Mazzucato and Torreele 2020).

As for the post-pandemic development of the economy, it will also be impossible to achieve appropriate levels through isolationism (Åslund 2020; Fung 2020).

The obvious benefits of globalization are reflected in the intensification of the use of Internet technologies (especially in education and trade) during the economic crisis.

Clearly, only through the globalization is it possible to overcome the global phenomenon of pandemics and concomitant difficulties (Abesadze 2020). Therefore, we can conclude that deglobalization stimulated by the COVID-19 pandemic is in fact pseudo-deglobalization (Papava 2021a).

To achieve the pandexit and ensure post-pandemic economic development, it is necessary to take globalization to a qualitatively new level; in other words, the world is facing the emergence of a new “wave” of globalization (El-Erian 2020).

There are heterogeneous and more or less controversial views on the future contours of renewed globalization (e.g., Schwab and Malleret 2021) but at this stage, in our view, it can be argued with certainty that managing economic security problems in the context of renewed globalization, primarily those pertaining to food (Blair and Kalibata 2020) and energy (e.g., Tvalchrelidze and Silagadze 2020) will be of utmost importance.

Thus, the COVID-19 pandemic has not only created a global threat but also contributed to the understanding of what opportunities should be used directly in the face of the pandemic and the subsequent pandexit which is also related to the conscious formation of the appropriate contours of a renewed globalization (Charaia 2020).

### **Big or Small Government?**

For years, the issue of the optimum size of a government has not lost its urgency for economists. The issue of the necessity and expediency of government intervention in the economy, as well as its scale, remains a subject of dispute. Naturally, the COVID-19 pandemic has once again raised the issue of the role of the government in a pandemic and in the economic crisis as well as during the pandexit (e.g., Archvadze 2020b; Bedianashvili 2021; Benashvili 2020; Chikhladze, Khidasheli and Ugulava 2021; Kakulia and Kapanadze 2020).

It is certainly not debatable that the economic role of the government increases during any economic crisis. Naturally, overcoming the COVID-19 pandemic and the economic crisis is impossible without the active role



of the government (Rodrik 2020; Stiglitz 2020a). Remarkable in this regard is the joint statement of 17 Nobel Prize winners in economics who, despite belonging to different schools of economics, unanimously support President Joe Biden's large-scale economic program (Goodkind 2021).

It is noteworthy that according to the traditional ideas prevailing in economic science, the government is an addendum to the economy, although the economic ability of the government is one of the independent factors of production and its participation in the economic processes is as necessary as that of the other factors of production according to the modern theory of factors of production (Papava 1993, 2017). According to this theory, the economic ability of the government as a factor of production "fits" the situation created by the economic crisis (Papava and Chkuaseli 2021a, 2021b). Indeed, government spending is rising in three directions in the course of the COVID-19 pandemic and the economic crisis. In particular, these include strengthening the health care system, providing economic assistance to disadvantaged communities and providing financial assistance to firms that have ceased operations.

It should also be noted that the disruption of global supply chains is increasing the role of national governments in assisting firms in finding potential alternative suppliers (Marin 2021a).

It is certainly noteworthy that the spread of a COVID-19-like virus, which could even lead to a new pandemic, is not ruled out in the future. In this context, the experience of human coexistence with COVID-19 and the functioning of the economy during the pandemic (Gigerenzer 2020), which was accumulated during the COVID-19 pandemic, is very important.

In our opinion, when determining the role of the government in governing the economy, it is necessary to be guided by the position that the economic ability of the government is an independent factor of production and, at best, political decisions that the government makes in the economy should not "go beyond" the action of this factor. Unfortunately, this is not always the case as is demonstrated by the "conflict" between the political function of the government and its economic ability during the economic crisis at large and, in particular, during the economic crisis. We will further discuss this below.

## **Economic Growth and the Zombie-ing of the Economy**

When it comes to post-pandemic economic growth, the focus is on sectors such as digital technologies, biomedicine and technologies that will focus on sustainable development in the wake of climate change (Spence 2021a).

During the COVID-19 pandemic, two important trends in the economy were identified which are relevant not only during the economic crisis but will also retain their importance after the pandemic. In particular, these trends are:

1. All the sectors of the economy where the use of digital technologies has expanded have achieved a substantial increase in labor productivity and this tendency is so strong that it will inevitably not only be maintained but also deepened after the pandemic (Mischke et al. 2021);
2. Blocking the liquidation of insolvent firms during the economic crisis and the financial support of the government to these firms as part of the anti-crisis measures facilitated the process of the zombie-ing of the economy (Pazarbasioglu and Weeks-Brown 2022; Stiglitz 2020b; Zingales 2021).

According to the first trend, labor productivity will increase especially in sectors such as health care, construction, retail and industry (Tyson and Mischke 2021). This trend is mainly the prerogative of developed countries. For developing countries, especially poor countries, technological backwardness will remain their acute problem (Rodrik 2021). It is noteworthy that during the COVID-19 pandemic, the internetization gap between developing and developed countries has widened (Passaris 2021).

It should also be noted that in developed countries themselves, it is mainly the large firms which are concentrating on digital technologies while small firms have less opportunity to do so as a result of their relatively modest finances. As a result, the increased dominance of large firms will limit competition and the same large firms will have less motivation to stay devoted to innovations (Eichengreen 2021).

To achieve high economic growth in the post-pandemic period, it is not entirely in the interests of politicians to have a large number of firms go bankrupt during the corona crisis which ultimately has a negative effect on economic growth (Pazarbasioglu and Weeks-Brown 2022; Roubini 2021b). This is why the approach of “soft budget constraints” was strengthened in relation to firms during the economic crisis. Firms can ignore losses since the government will provide assistance regardless of the outcome (Bhidé 2021) and this leads directly to the zombie-ing of the economy (Stiglitz 2020b; Zingales 2021).

The crux of the matter is that declining solvency is a major problem for most firms in the time of the economic crisis. Following political interests, governments tend to favor bankruptcy legislation that would impede the liquidation of these firms in order to maintain voter support (Pazarbasioglu

and Weeks-Brown 2022). This approach was indeed dominant when making amendments to the bankruptcy legislation during the coronomic crisis (Boon 2020). Even after the pandexit, it is impossible to use a bankruptcy mechanism that would ensure the liquidation of insolvent firms, again out of political interests (Papava 2020b, 2021c). In other words, the pandexit will not end the process of economic zombie-ing. This suggests that the conflict that arises between the political function of the government (holding democratic elections) and its economic ability (as an independent factor of production) during economic crises ends in the favor of political function. It is a fact that winning periodic political elections is far more important for politicians than governing the economy effectively (Papava and Chkuaseli 2021a, 13–14).

The first case of a zombie economy in the history of financial and economic crises was recorded in Japan in the 1990s (e.g., Hoshi 2006; Kane 2000). During the global financial and economic crisis of 2007-2009, the zombie economy expanded globally (e.g., Harman 2009; Onaran 2012; Pazarbasioglu and Weeks-Brown 2022; Quiggin 2010). It is noteworthy that the process of the zombie-ing of the economy maintained its relevance even before the onset of the coronomic crises (Krugman 2020). This also corroborates the argument that escaping from a zombie economy will not be possible even after the pandexit.

Therefore, economic growth will have two “components” inherited from the coronomic crisis after the pandexit: digital technologies and a zombie economy. The latter will clearly be an obstacle to achieving frontier and catch-up growth (Hudson 2015).

### **“Chainflation” and Underproduction Inflation**

One of the most pressing problems during the coronomic crisis is high inflation which has become a main challenge for politicians and economists (e.g., Acemoglu 2021a; Barro 2021; El-Erian 2021b; Krugman 2022a; Reinhart and Luckner 2022). A clear example of the politicization of the issue is the high inflation in the United States which has been named “Bidenflation” (Cassidy 2021).

The fact is that particularly high inflation rates were recorded in 2021, although virtually no one had previously predicted that one of the most acute consequences of the coronomic crisis would be rising inflation (Furman 2022). Even though the International Monetary Fund (IMF) believes that inflation will return to pre-pandemic levels by mid-2022

(Caselli and Mishra 2021), this view is not universally accepted as it is difficult to predict the inflation rate for 2022 even looking through the prism of 2021 results (O'Neill 2021a). We should also not overlook that high levels of inflation negatively affect the prices of stocks and bonds (Roubini 2022). At the same time, the threat of stagflation is becoming increasingly real in a situation created by the economic crisis (El-Erian 2021a; Roubini 2021a, 2021c).

As it is known, inflation is the most difficult to predict from all of the economic indicators and this task became even more difficult during the COVID-19 pandemic as the uniqueness of the economic crisis made even a 50-year pre-pandemic statistical database practically unsuitable for predicting inflation during this crisis (Weber A. 2021).

It is noteworthy that economists have not yet fully agreed on the specific approach to be given preference for tackling high inflation – reducing public spending and raising interest rates or lowering interest rates, or introducing price controls (Rodrik 2022). In order to identify the preferential approach to remedy high inflation, it is necessary to take into account that economics is not universal but is rather contextual (Rodrik 2016). It is from the context of economics that we must explain the nature of inflation caused by the economic crisis (Rodrik 2022). In other words, we must find out what caused the inflation: an increase in demand, a fall in supply or some combination of the two and only then should we pick the preferential choice to stop the inflation (Sachs 2021). At the same time, it will help us to see whether high inflation during a economic crisis is positive for the further development of the economy (James 2021).

As already mentioned above, national governments provided financial assistance to their populations during the economic crisis which offers some reason why the rise of inflation during this crisis is precipitated by increased demand. It should also be noted that the suspension of the restaurant business, the tourism sector and civil aviation attributed to the COVID-19 pandemic has led to an increase in the expenditures on the purchase of goods in the consumer basket, thereby contributing to the rise in prices of these goods (Weber A. 2021).

Particularly noteworthy is the fact that the economic crisis led to the disruption of global supply chains (Derviş and Strauss 2020), precipitating a decrease in supply and, consequently, a rise in inflation. There was an expectation that the rise in inflation was caused by the short-term supply-side bottlenecks (Stiglitz 2021) but as it turned out, there was actually a meltdown of the global production system (Coyle 2021).

Thus, the reason for the increased inflation is intricate as it is caused not only by an increase in demand but more so by a decrease in supply. Here, we should note that central banks have the tools to regulate demand-driven inflation while it is fundamentally impossible for central banks to restore disrupted global supply chains and thus regulate inflation driven by the reduced supply. This situation has created some confusion in the measures taken by central banks, especially when these banks apply the inflation targeting regime in monetary policy (e.g., Chikobava 2021; Cochrane 2021; Roach 2022). In particular, in order to limit demand by reducing the money supply, these banks raised interest rates, raising the price of money and made it even more difficult for firms to borrow in order to increase their supply (at the same time, this measure helped to increase savings which will become an additional source of lending in the future). As a result, we have a situation where central banks have substituted a more demand-driven inflation with a supply-side inflation.

It should be emphasized that during the coronomic crisis, the main factor for the rising inflation is the reduction of supply which is caused by the disruption of global supply chains. That is why the term “supply-chainflation” (Pride, Reynolds and Vovk 2022) was coined precisely for this type of inflation. The term “chainflation” is a combination of the two English words “chain” and “inflation.” As the disruption of global supply chains not only reduces supply but also reduces production directly due to the disruption of the binding chains of entire technological cycles, we can conclude that supply-chainflation is one of the causes of ***underproduction inflation*** (Papava 2022).

The main mistake made in formulating economic policy during the coronomic crisis is to view the inflation caused by this crisis as a macroeconomic problem (Galbraith 2021) when, in fact, inflation is mainly precipitated by the disruption of global supply chains. In other words, *inflation caused by the coronomic crisis is not inherently an instrumental problem.*

The global supply chains were disrupted for different types of goods. For example, this problem has been particularly acute for the US economy in terms of the following products: semiconductors, large-capacity batteries of the sort used in electric vehicles, critical minerals and materials, pharmaceuticals and advanced pharmaceutical ingredients (Marin 2021a). At the same time, the increase in prices for building materials, which is due to the disruption of relevant global supply chains, has led to an increase in housing prices; i.e., the formation of a “housing bubble” which will inevitably burst as soon as the disruption problem in the global supply chains will be alleviated (Krugman 2022b).

We have already mentioned above that the understanding of inflation as a major macroeconomic problem during the coronomic crisis is the basis for the mistake made by central banks which becomes particularly acute when the inflation targeting regime is used in the monetary policy pursued by these banks. The disadvantages of this regime were already evident during the global financial and economic crisis of 2007–2009 (e.g., Frankel 2012; Weber A. 2015). Particularly noteworthy is the fact that the weakness of the inflation targeting regime in monetary policy is most apparent in import-dependent countries (Stiglitz 2008). It is necessary to understand that the disruption of global supply chains makes imports more expensive, *ceteris paribus* leading to an increase in the inflation rate of any import-dependent country. Inflation targeting central banks simply do not have the ability to regulate this problem efficiently.

The problem of rising food prices became particularly acute during the coronomic crisis (Ghosh 2022; Reinhart and Luckner 2022) which, as already mentioned above, is not necessarily macroeconomic in nature. Not only in the times of the coronomic crisis but also in general, inflation modifications such as agflation (agrarian inflation; i.e., food inflation), munflation (price increase on medication, utilities, and nutrition) and imflation (rising import prices) have a much more dire significance vis-à-vis the poor population than the simple inflation indicator (Charaia and Papava 2017, 2018). We note that the “complex inflation targeting” regime in monetary policy, which gives concurrent consideration to the targeting indicators of inflation and imflation, becomes much more flexible than the inflation targeting regime and gives clearly better results, especially for the import-dependent countries (Papava and Charaia 2019).

In the interests of the population and the economy at large, it is advisable to exercise control over strategic prices (e.g., oil prices) (Weber I. 2021). It is believed that if the disrupted global supply chains are not restored by the summer of 2022, then the regulation of strategic price will be inevitable (Galbraith 2022). Completing the process of repairing disrupted supply chains and, more so, renewing them is less likely to occur in a relatively short period of time. Does this mean that there is the inability of central banks to manage inflation and the inevitability of establishing control over strategic prices?

In fact, the central banks need to adjust and “align” demand with the reduced supply levels through the instruments at their disposal (Cochrane 2021). Achieving this is, of course possible; however, the results will be very undesirable as this will further inhibit the already reduced supply growth (Stiglitz 2022a).

The breakdown of global supply chains is by its nature a deglobalization phenomenon and so the direct link between deglobalization and supply-chaininflation is clear (Marin 2021b).

Overcoming supply-chaininflation will be possible not simply by the restoration of broken supply chains but rather by an approach developed on the basis of a new understanding of globalization (Rogoff 2021). In particular, it is noteworthy that in the context of the pandemic, the problem of expanding supply and increasing productivity becomes a main priority for the global economy (Spence 2022). Attention should also be paid to the fact that countries developing the real sector of the economy before the onset of the COVID-19 pandemic were better prepared to deal with the difficulties posed by this crisis (Stiglitz 2022b).

Despite the increase in production cost, there is a clear trend towards the return of those industries that were previously (before the economic crisis) brought abroad (Issing 2021). In turn, this leads to cost-push inflation (McConnell and Brue 2008, 136). In such a case, the market's acceptance of finished goods with raised prices because of the increase in their production costs means that a rise in inflation will occur immediately. If the market does not accept the increased prices, then some entrepreneurs will leave the market (and switch to other activities) in order not to lose expected profits, leading to a decrease in supply and, therefore, an increase in prices.

An increase in production costs as well as a break in supply chains lead to a decrease in the level of production which is also the cause of underproduction inflation.

Therefore, the exit from supply-chaininflation, *ceteris paribus*, is more likely to lead to inflation caused by rising production costs which means that one cause of underproduction inflation (i.e., supply chain disruption) would be replaced by another (i.e., rising production costs).

As is well known, global supply chains were formed on the basis of the principle of economic efficiency during the pre-pandemic globalization. The question to be answered is the extent to which it is necessary to reject this scheme in the times of the economic crisis and the pandemic. In our view, this scheme does not need rejection but requires refinement. In particular, it is necessary to not only consider the risks posed by the COVID-19 pandemic when assessing the economic effectiveness of restored or entirely new supply chains but also a possible future pandemic.

From today's perspective, one can focus on a few principled approaches. In particular, three directions emerge in the formation of global supply chains

taking into account the experience accumulated during the coronomic crisis (Marin 2021a):

1. The return of production previously moved out from the country back to the same country;
2. The creation of additional resource reserves to compensate for the fluctuations in the operation of supply chains;
3. The acquisition of resources by firms from different or diversified sources.

In fairness, it should be noted that the diversification of supply chains is not at all an easy task to realize and there is a greater economic risk associated with it as the supply chain becomes more complex (Acemoglu 2021b).

Due to the complexity of global supply networks, economics is faced with the need to create and develop models for the formation and operation of the supply chains as well as their response to possible fluctuations (Spence 2021b).

### **Increased National Debt – Threat of a Debt Crisis**

The coronomic crisis, as noted above, has resulted in declining tax revenues in the national budget (the firms out of business can no longer pay taxes) and a substantial increase in budget expenditures (increased funding for the health care sector, financial assistance for the socially disadvantaged population and financial assistance to firms that had to suspend their activities). In order to eliminate this budgetary imbalance, national governments were forced to significantly increase their public debt which is the sum of a country's domestic and foreign debts.

Developed countries have mainly increased their domestic debt while developing countries have primarily resorted to foreign debt due to their limited savings.

The rise in public debt is directly reflected in the national budget and is known to create difficulties for the economic development at the country level (e.g., Charaia and Papava 2021; Papava and Charaia 2021) as well as in terms of its individual regions (e.g., Jibuti 2020).

Accumulating large amounts of public debt is not advisable as it complicates the ability to repay and service it properly which, *ceteris paribus*, could lead to a debt crisis (e.g., Asonuma et al. 2019).



Throughout the coronomic crisis, almost all countries were forced to make changes to the national budget. One of the primary reasons for this was the increase in foreign and domestic debts (IMF 2020b).

The economic capacity of an individual country to service and pay off public debt is determined by the ratio of the debt to the gross domestic product (GDP) of a given country.

The public debt of different countries has been growing over the years so that the public debt of some countries not only exceeded the internationally recognized GDP threshold of 90% (e.g., Krugman 2022c) but also surpassed the entire GDP even before the onset of the coronomic crisis (Basu 2020). The clear leader in this regard is the third largest economy in the world – Japan (e.g., Jacobs 2022). As already mentioned above, the amount of public debt in the world has increased significantly in the face of this crisis, reaching numbers never seen before (Ghosh 2020). For example, by December 2020 the public debt of Venezuela reached 350% of its GDP, Japan – 266%, Sudan – 259%, Greece – 206%, Lebanon – 172%, Italy – 156%, Libya – 155%, Portugal – 134%, Singapore – 131%, the USA – 128%, Spain – 120%, Jamaica – 110%, Montenegro – 103%, etc. (Trading economics, n.d.).

The IMF estimates that global public debt accounted for 83% of the 2019 global GDP while it reached 100% by 2020 (IMF 2020a, IX). The fact is that this figure sharply increased in 2020; however, it stabilized by 2021 in a situation that is likely to continue until 2026 (IMF 2021, 2).

As we can see, many problems were exacerbated by the coronomic crisis, such as the sharp and significant increase of the public debt of some countries, and the need to address them was raised.

Increased public debt in the post-pandexit years will likely put both developed and, above all, developing countries under serious fiscal pressure. Therefore, one of the most important challenges for the G20 countries will be to create a new global system of debt restructuring in order to avert a global debt crisis.

### **Instead of a Conclusion or What Should We Expect?**

Since the roll out of coronavirus vaccines in 2021 and the beginning of a more or less successful global vaccination process, the restrictions on economic activity were gradually lifted, reviving the economy and boosting economic growth. In other words, the verge of the pandexit and

the beginning of the end of the coronomic crisis is at hand. Four possible scenarios could unfold:

1. In case of delays in the vaccination of the world population (for example, due to an improper distribution of vaccines between countries or the international anti-vaxxer movement), the probability of new strains of the coronavirus emerging is quite high and this may lead to renewed restrictions on economic activity and negatively affect economic growth;
2. Despite delays in the vaccination of the world population, each new strain of the coronavirus may be weaker than its predecessor, thereby leading to the gradual end of the pandexit while the crisexit would have already occurred;
3. Despite the delays in the vaccination of the world population and in the wake of the development and dissemination of effective drugs for the treatment of coronavirus, the trend of economic growth may be maintained, laying an even stronger foundation for the crisexit;
4. The second and the third scenarios will occur simultaneously.

As of early 2022, the first scenario seems the least likely to occur.

In any case, overcoming the deglobalization and creating and implementing a renewed globalization format will play an important role among the main economic challenges of pandexit. Essentially, it should be a managed process so that the world would face it in a much more prepared manner in the event of a similar large-scale global threat such as the COVID-19 pandemic.

The issue of government size will remain a challenge for individual countries. However, it is necessary to understand that a much more important issue is to “protection” the economic ability of the government, as an independent factor of production, from the influence of its political function. Unfortunately, a constructive approach in this direction has yet to be developed by economic science.

The government’s financial support to the out-of-business firms in the times of the coronomic crisis is the way towards economic zombing. Bitter experience here was accumulated in Japan in the 1990s and in the world at large during and after the global financial and economic crisis of 2007-2009. The solution to the problem is directly linked to the adoption of an effective bankruptcy law which, as a rule, is inhibited by the aforementioned political function of the government.

The worldwide deterioration of economic activity has led to the disruption of global supply chains. As a result, supply declined, leading to a higher inflation, known as supply-chaininflation. The renewed economic network of globalization will be based on new global supply chains that will be more protected from international threats than they were before the COVID-19 pandemic. As a result, production will be shifted to countries and regions where production costs will be relatively high and leading, ceteris paribus, to inflation caused by the rising production costs. Therefore, this will be typical for the period after the post-pandexit as well.

In the times of the coronomic crisis, governments have increased the amount of public debt in order to solve urgent tasks, exceeding the GDP of many countries. Consequently, one of the challenges of the pandexit is to ensure that increased public debt does not escalate into a global debt crisis.

Naturally, there are other problems as well alongside the main economic challenges of the pandexit which have been highlighted here. Their research and the exploration of solutions are the subject for a separate independent study. Particularly significant is the study of the economic problems directly related to the war initiated by Russia against Ukraine in February 2022 (for example, Hannon 2022).

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