







# Assessment of the Risks of Transition from a Global Pandemic Crisis to a Model of Long-Term Economic Growth

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## Abstract

The paper aims to assess the depth of damage to the world economy by the global economic crisis caused by the COVID-19 pandemic. Moreover, the paper aims to substantiate the possibilities of post-crisis recovery of the world economy and ensuring long-term economic growth. The authors conducted a comparative analysis of the dynamics of key macroeconomic indicators during the recession of 2008 and 2020. The authors concluded that the recession caused by the COVID-19 pandemic led to less disastrous consequences for the world economy than the global crisis of 2008. The analysis showed that the main problem in assessing the possibilities of global economic recovery is the problem of increasing heterogeneity in the development of individual countries or their groups (developed countries, including G7 countries, countries with developing economies). According to all analyzed indicators, during the recovery from the pandemic crisis, developing economies have a greater margin of safety than the economies of developed countries. The authors explain this by the fact that developed economies took the brunt of the “pandonomics,” and the financial strength of developing economies during the COVID-19 pandemic was provided by a global program to save them through monetary policy. The paper identifies problem areas in the transition from recession to a model of sustainable

economic growth and substantiates recommendations for overcoming them.

## Keywords

Pandemic · COVID-19 · Economic recovery · Economic policy · Pandemic crisis · Post-pandemic economy · Pandonomics · Long-term economic growth

## 1 Introduction

The COVID-19 pandemic caused more than 290 million cases of diseases, claimed more than 5.4 million lives (WHO, 2022), led to a sharp decline in business activity and the destruction of global supply chains and established business ties, and launched an inflation spiral and a global pandemic crisis (Karpunina et al., 2021, 2022).

According to analysts, the prospects for the world economy to emerge from the global pandemic crisis on the trajectory of sustainable economic growth look more illusory for emerging markets and low-income developing countries than for developed countries. However, the severity of the consequences of the COVID-19 pandemic for the economies of developed and developing countries, as well as emerging market countries, is based not only on the assessment of the current economic situation but also on the assessment of public access to vaccines, the availability of financial resources for political support of income incentive programs and financial support for the most affected sectors of the economy. In advanced economies, almost 60% of the population is fully vaccinated and will receive revaccination in the future; in low-income countries (developing economies and emerging markets), about 96% of the population remains unvaccinated (IMF, 2021d).

Another pressing problem for the global economy is the problem of starting a spiral of inflation caused not only by a sharp stimulation of the financial resources of the real sector of the economy and household budgets but also by supply

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disruptions and a shortage of goods supply. Along with the release of pent-up demand and the recovery in commodity prices, this also supports an inflationary surge in the economy. Inflationary pressure on household incomes and uncontrolled price hikes for vital resources (e.g., rising gas prices) threaten the political stability and the economic well-being of developing and developed countries (IMF, 2021c). An example is chaos and unrest in Kazakhstan, global social unrest, and the shaking of state institutions caused by a sharp increase in gas fuel prices for the population.

Apparently, it is necessary to assess the risks of transition from a global pandemic crisis to a model of long-term economic growth in developed and developing countries, as well as the development of effective measures for its implementation.

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## 2 Literature Review

Most scientists and economists note the unprecedented consequences for the world economy from COVID-19 in terms of a sharp and global decline in economic activity, falling incomes of the population and businesses (Baldwin & Weder di Mauro, 2020; Bonadio et al., 2020; Chetty et al., 2020; Guerrieri et al., 2020; Gukasyan et al., 2022; Hepburn et al., 2020; Jackson et al., 2021; Karpunina et al., 2020; Niyazbekova, 2020; Smirnov, 2020; Van Bergeijk, 2021). Such a situation in economics is described by the term “pandonomics,” or the economy of ruin. The development of pandonomics will require a revision of approaches to the analysis of the world economy, the institutional organization of society, and the assessment of long-term consequences for economic growth (Cambridge Econometrics, 2020; Kirillov & Miller, 2021; Wyplosz, 2020). Chudik et al. (2020) note that the consequences of the COVID-19 pandemic are significantly worse in their impact on the global economy than from the previous eight global crises.

In this research, the authors test several hypotheses about the unprecedented fall of the world economy and the greater vulnerability of developing economies relative to developed economies in the post-pandemic period.

The first hypothesis is the assumption that the most serious risk of post-pandemic development for the world economy is the growth of public debt and external obligations. The author’s assumption is based on the results of the study of Smirnov and Karelina (2021), who note that a high level of debt obligations in developing countries can lead to excessive stress for debtor countries (developing economies) and creditor countries (developed economies).

The IMF report “Global Imbalances and the COVID-19 Crisis” shows that the low level of reserves was a key vulnerability factor before the 2007–2008 crisis for developing economies; in 2020–2021, increased obligations on foreign

debt began to fulfill this role (Kaufman & Leigh, 2020). In the post-pandemic period, the prospects for restoring economic growth in developing economies are very contradictory for several reasons, including the following:

- These economies have a higher share of the sectors most severely affected by the COVID-19 pandemic (e.g., the tourism sector) compared to developed economies;
- Underdevelopment of health systems;
- Strong dependence on external financing (including the flow of remittances from abroad);
- High public debt with a subsequent tendency to increase external debt.

Rodygina and Musikhin (2020) prove that developing economies will suffer more during the post-pandemic period than developed economies due to the strong integration of developing economies into global value chains, which leads to their strong dependence on external foreign financing and on downturns in international trade and exports of commodities and tourism.

In this research, the authors substantiate the scientific hypothesis about the greater economic vulnerability of developing economies relative to developed economies during the recession of 2020–2021. For this purpose, the authors analyze economic indicators (from the IMF reviews) for the long-term period.

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## 3 Methodology

The research aims to assess the depth of damage to the world economy by the global economic crisis caused by the COVID-19 pandemic by groups of developed countries and countries with emerging economies, as well as to identify the key risks of transition from the global pandonomics crisis to a model of long-term economic growth.

The research objectives are as follows:

1. To assess the depth of the economic crisis based on the analysis of the dynamics of changes in basic economic indicators;
2. To assess the stability of the world economy by studying changes in the volume of investments, gross national savings, the current account balance of payments, and the volume of public debt;
3. To identify problem areas in the transition from recession to a model of sustainable economic growth and formulate recommendations for overcoming them.

The authors analyze the following groups of countries:

- 40 advanced economies (developed economies);

- A subgroup of large advanced economies—G7 countries (USA, Japan, Germany, France, Italy, UK, and Canada);
- A group of 156 emerging market and developing countries (emerging economies).

The research methods include theoretical analysis, graphical method, economic and statistical analysis, systematization, systematic approach, and the comparative method.

#### 4 Results

We begin our analysis of the economic weakness of developing economies relative to developed economies by comparing the rate of annual change in real GDP (Fig. 1).

In the long term, two global downturns in the global economy can be distinguished—the crisis of 2008 and the crisis of 2020. In 2009, real GDP in the world decreased by 0.1%: the GDP of developing economies grew by 2.8%, the GDP of developed economies reduced by 3.3%, and the most significant decline in real GDP occurred in the G7 countries (−3.7%). In 2020, the recession caused by the COVID-19 pandemic led to a 3.1% decrease in real global GDP: a decline in GDP equaled 4.5% in developed economies and 4.9% in the G7 countries. The smallest decline in GDP (−2.1%) is typical for developing economies. IMF analysts also predict that, on average, over the period 2021–2026, real GDP in the world will grow by 4.1%: it will increase by 2.7% in the G7 countries, by 2.8% in developed economies, and by 4.9% in developing economies (IMF, 2021d). Thus, the greatest strength of the sharp decline in business activity during the two global recessions of 2008 and 2020 is observed in developing economies.

Another pressing problem of the post-pandemic period is related to the growth of inflation during the recession, as well as the subsequent long-term trend of rising inflation

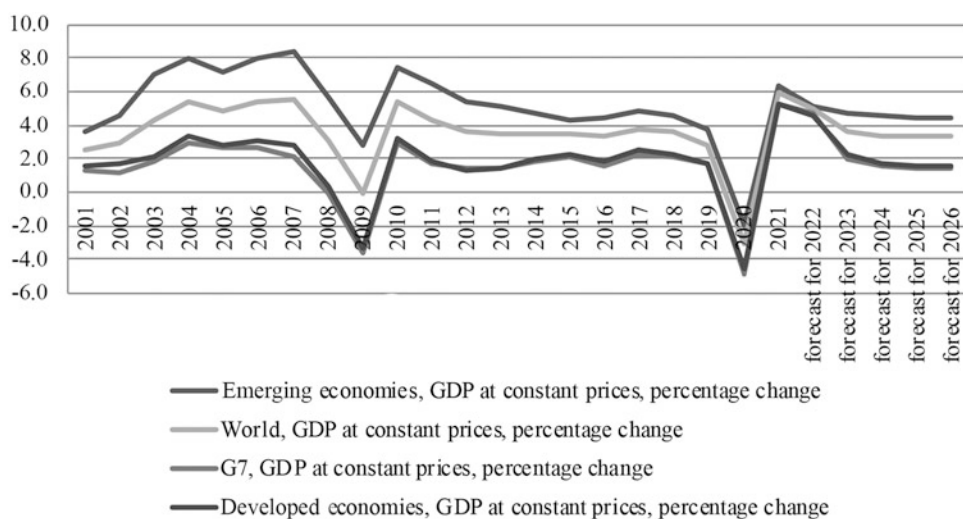
expectations. In terms of macroeconomics, emerging markets and developing countries should be strongly affected by side effects in the form of capital outflows, exchange rate depreciation, and inflation (Abel & Bernanke, 2012).

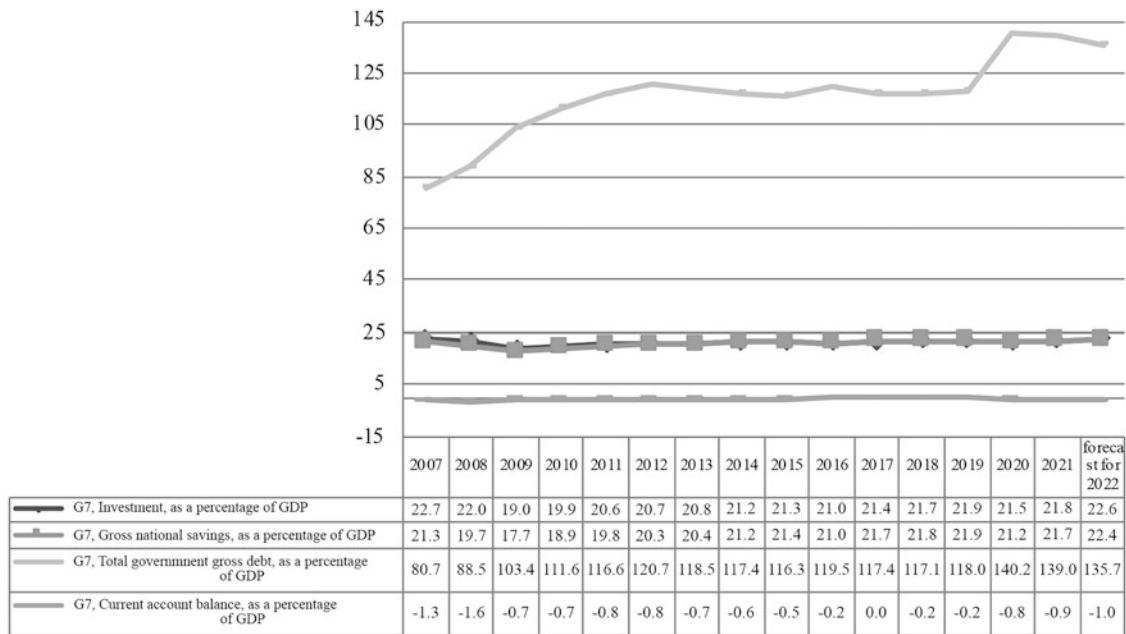
We will analyze the changes in average consumer prices from 2001 to 2021. The growth of inflation during the recession of 2008–2009 became a threat to the stability of the world economy.

In 2008, the inflation rate rose to 6.3% in the world; in developed economies and in the G7 countries, it reached 3.4% and 3.2%, respectively. We can note a serious increase in inflation in developing economies to 9.2%. In 2020–2021, the jump in inflation was smoother than during the 2008 crisis. In 2021, the global average annual inflation rate was 4.3%; it reached 2.8% in developed economies and 5.5% in developing economies (IMF, 2021d).

The hypothesis of the greater economic vulnerability of developing economies compared to developed economies during the recession of 2020–2021 cannot be assessed without considering the decline in the national welfare of the economies. National well-being depends on the total income of the country and on the amount of accumulated wealth, including gross accumulated savings. The latter is determined by the volume of investments in the economy and the current account balance of epy economies. IMF statistics indicate that the global current account balances of countries increased during the recession of 2020, and the pandemic probably slowed the downward flow of funds from richer countries to poorer countries (IMF, 2021b). This fact highlights the uneven impact of the COVID-19 pandemic and potentially exacerbates the differences in the speed of recovery of different economies. Additionally, subsequent waves of COVID-19 may complicate the downturn in global trade and supply chains, reduce investment demand, and limit the financing of current account deficits for emerging economies.

**Fig. 1** The rate of annual change in real GDP of developed countries, G7 countries, and developing economies, 2001–2026, in %. Source: Compiled by the authors based on IMF (2021d)





**Fig. 2** Current account balance, the volume of investments from GDP, gross national savings, and gross public debt in the G7 countries, 2007–2022. Source: Compiled by the authors based on the IMF (2021d)

At the beginning of the COVID-19 pandemic, developing economies faced a sharp and sudden change in the direction of capital flows, as well as the depreciation of national currencies. Subsequently, the soft and large-scale support of the global economy improved the relations of investors and creditor countries to risk, which caused the stabilization of capital flows. New waves of the COVID-19 pandemic will undoubtedly cause a tightening of global financial assistance to businesses and the population, which will weaken the possibility of maneuvering to manage the current account deficit for developing economies, reduce the current account balance of commodity exporters, and, probably, prolong the downward trend in world trade. In the medium term, emerging economies will face the need to stimulate investment and limit excessive private savings. This will require countries with excessive current account surpluses to implement measures aimed at attracting private investment in the context of tightening monetary policy. In particular, stimulating the inflow of private investment into economies suffering from recession is possible by preserving gross national savings and preventing their excessive growth.

Countries with developing economies may face the problem of growing insolvency on their debts against the background of rising interest rates and maintaining low growth rates of government revenues. Thus, despite the expected budget deficit reduction in 2021 by about 2% GDP, the global public debt remained at a record high, close to 100% of GDP (IMF, 2021a).

We propose to conduct our assessment of the “shocks” of the impact on the global economy through a more detailed analysis of the annual changes in several indicators linked to the level of GDP: the balance of the current account, the volume of investments from GDP, gross national savings, and total government gross debt for the period from 2007–2022. We will start our analysis with the G7 countries (Fig. 2).

During the 2008 crisis, the G7 countries saw a decline in investment and gross national savings. In 2007–2009, investments decreased by 0.3%, 0.7%, and 2.9% of GDP, respectively. There was also a decrease in the volume of gross national savings (by 0.5%, 1.5%, and 2% of GDP, respectively). In 2008–2012, in the G7 countries, there was a trend of a sharp increase in the total gross public debt with maximum growth in 2009 (by 15% of the GDP level) against the background of a persistent current account deficit. During the recession of 2020, the G7 countries saw a decrease in investment by 0.4% and gross national savings by 0.7% of GDP, a sharp increase in gross public debt by 22%, and an acute increase in the current account deficit by 0.6% of GDP.

A similar analysis for a group of developed economies is presented in Table 1.

In developed economies during the 2008 recession, investment and gross national savings decreased by 3% and 2% of GDP, respectively. Then, in developed economies, a long-term trend was laid for the growth of the gross public debt with a maximum of 13% of the GDP level in 2009. The

**Table 1** Current account balance, the volume of investments from GDP, gross national savings, and gross public debt in developed economies, 2007–2022

Year/ Indicator	Investment, a percentage of GDP	Gross national savings, a percentage of GDP	Total government gross debt, a percentage of GDP	Current account balance, a percentage of GDP
2007	23.7	22.7	71.1	−0.9
2008	23.0	21.3	77.7	−1.3
2009	20.1	19.4	91.0	−0.2
2010	20.9	20.7	97.4	0.0
2011	21.4	21.4	101.4	−0.1
2012	21.4	21.9	105.5	0.1
2013	21.3	22.0	104.0	0.5
2014	21.6	22.7	103.6	0.5
2015	21.8	23.0	103.1	0.6
2016	21.6	22.6	105.6	0.8
2017	22.1	23.3	103.2	1.0
2018	22.3	23.4	102.7	0.8
2019	22.6	23.4	103.8	0.6
2020	22.3	23.0	122.7	0.3
2021	22.4	23.6	121.6	0.4
2022 (forecast)	23.1	24.0	119.3	0.3

Source: Compiled by the authors based on the IMF (2021d)

2008 recession led to a current account surplus for developed economies. This trend was not affected by the recession of 2020, when the balance decreased by 0.3% of the GDP level. The recession of 2020 caused a decrease in investment and gross national savings by 0.4% of GDP and an increase in gross public debt by 18.9% of GDP.

Let us see how the recessions affected the developing economies (Table 2).

Developing economies reacted to the recessions of 2008 and 2020 by increasing investment and growing the volume of gross national savings (Restoy, 2020). Moreover, the shock reaction to the preservation of savings in developing economies in 2020 is better than during the recession of 2008: in 2020, the volume of gross national savings increased by 1% of GDP, while savings in 2009 sharply decreased by 1.9%. The gross public debt in developing economies increased by 5.1% in 2009 and by 9% of the GDP in 2020, not due to the rise in external debt. Thus, in 2009, the external public debt decreased by 0.5% of GDP; in 2020, there was an increase in external debt by only 2%. Current account surpluses in emerging economies persisted during the recessions of 2008 and 2020. However, in the post-crisis years, there was a decrease in the current account balance by 2.1% of the GDP level in 2009 and an increase in the current account balance by 0.6% of the GDP level in 2020. During the recession of 2008, there was a tendency to reduce the current account surplus of the balance of payments of developing economies from a pre-crisis peak in 2006 (4.7% of GDP) to a deficit in 2016 (0.3% of GDP).

## 5 Conclusion

The analysis allows us to draw an unambiguous conclusion that the recession caused by the COVID-19 pandemic led to less disastrous consequences for the world economy than the global crisis of 2008. This is due to the unprecedented program of assistance to businesses and the population from state institutions during the pandemic. The opinion of a number of economists about the ruinousness of pandemics for the world economy and especially for developing economies is not confirmed by the analysis of economic indicators (GDP, inflation, level of public debt, investments, national gross savings, and the current account balance of payments). According to all analyzed indicators, developing economies have a greater margin of safety relative to developed economies. This situation can be explained by the fact that developed economies, and especially the G7 countries, have taken the brunt of pandemics. Simultaneously, the financial strength of developing economies during the COVID-19 pandemic is explained by the global program of the rescue of developing economies through the soft monetary policy of the leaders of the world economy. The risk of deepening economic differences between developing and developed economies is very significant; it is caused by the ongoing COVID-19 pandemic, the demand for a transition to a green economy, the deepening gap in access to financial resources, and food security risks. These risks should be mitigated through an adequate policy of preserving



**Table 2** Current account balance, the volume of investments from GDP, gross national savings, and gross public debt in developing economies, 2007–2022

Year/ Indicator	Investment, a percentage of GDP	Gross national savings, a percentage of GDP	Total government gross debt, a percentage of GDP	Current account balance, a percentage of GDP	External debt, total, a percentage of GDP
2007	29.3	32.5	35.5	3.7	26.5
2008	30.4	33.3	33.6	3.4	27.4
2009	30.6	31.4	38.7	1.2	26.9
2010	31.6	32.6	37.5	1.2	26.1
2011	32.1	33.3	36.8	1.4	26.8
2012	32.3	33.1	36.7	1.2	26.5
2013	32.2	32.4	37.8	0.5	28.5
2014	32.4	32.6	39.8	0.5	30.5
2015	32.2	31.5	43.4	−0.2	30.8
2016	31.6	31.1	47.8	−0.3	30.2
2017	32.0	31.6	50.0	−0.1	30.1
2018	32.9	32.4	51.8	−0.2	30.9
2019	32.6	32.3	54.0	0.0	30.6
2020	33.1	33.3	63.1	0.6	32.6
2021	33.2	33.9	63.4	0.8	31.3
2022 (forecast)	33.5	33.9	64.8	0.6	30.4

Source: Compiled by the authors based on IMF (2021d)

international liquidity for countries with limited economic opportunities, as well as measures to maintain the stability and sustainability of developed and developing economies. The author's recommendations are related to the need to enhance the adaptability of fiscal policy aimed at stimulating the transition of the world economy to environmentally friendly technologies and digital transformation, increasing productivity and resilience to future global crises. It is necessary to increase the volume of public investments in high-quality physical capital, education, and healthcare, ensure the implementation of employment preservation programs, and improve the social protection of the population. In the post-pandemic period, developing economies will need to implement targeted fiscal and financial measures to stimulate growth in the export areas of the economy and tourism, most affected by the COVID-19 pandemic. The inevitable tightening of monetary policy when exiting the pandonomics will require developing economies, vulnerable to a decrease in the inflow of remittances, to conduct programs to support access to social services for migrants and their families. The ongoing pandemic will require governments of developing economies to prepare for possible outbreaks of economic instability and the Kazakh version of the socio-economic scenario.

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