The Impact of the 2020 Crisis on Imbalances in the World Economy: Problems of Balance and Prospects for Sustainable Development

Sergey S. Zmiyak¹, Evgeniy S. Porotkin², Larisa P. Steblyakova³, and Karina A. Chernitsova⁴

¹ Don State Technical University, Rostov-on-Don, Russia
sergey_zm@list.ru

² Samara State Technical University, Samara, Russia
Evg.porotkin@mail.ru

³ Karaganda State Technical University, Karaganda, Kazakhstan
Larissastkaz@mail.ru

⁴ Plekhanov Russian University of Economics, Moscow, Russia
karinaaa2004@mail.ru

Abstract. Purpose: The purpose of this work is to study the impact of the 2020 crisis on imbalances in the world economy from the point of view of the problem of its balance and the prospects for its sustainable development.

Design/methodology/approach: The methodology of this study is to predict and scenario the values of the indicators of sustainable development highlighted in chapter 2 of this book, as well as to compare the difference between developed and developing countries in each scenario.

Findings: It has been proved that as the 2020 economic crisis deepens, the imbalances in the world economy, expressed in the differences between developed and developing countries, increase. In 2019, developed countries showed 100.26% greater sustainability compared to developing countries. In 2020, under the optimistic scenario, the imbalance will increase to 119%, under the realistic scenario to 142.96%, and under the pessimistic scenario to 198.45%.

Originality/value: It is justified that the 2020 economic crisis has a negative impact not only on national economies, impeding their sustainable development, but also on the global economy as a whole, increasing its imbalances. Therefore, in order to maintain a balanced world economy, it was necessary to combine the efforts of developed and developing countries to jointly manage the crisis and accelerate the resolution of the crisis.

Keywords: 2020 economic crisis · The COVID-19 pandemic · Imbalances in the world economy · Balance · Sustainable development

JEL Code: C31 · C33 · C38 · F63 · Q01 · Q56 · O11 · O12 · O31 · O32 · O33 · O38 · P25 · P48 · R11 · R13 · R58
1 Introduction

The sustainable development goals have been adopted at the global level both to demonstrate their universality and commonality for modern economic systems and to demonstrate the need for joint initiatives by the countries of the world and to orient them towards cooperation and partnership. The stability of the world economic system is determined by the stability, equilibrium, flexibility and adaptability of its national economies from the standpoint of aggregated indicators and at the same time by a balance from the standpoint of erasing the differences between them.

The global economic crisis has reached all countries of the world equally, but their opportunities to emerge from the crisis are different. Developed countries, as traditional leaders of the world economy, have progressive health systems and therefore are the first to receive a medicine and vaccine for COVID-19. This will allow them to earlier lift restrictions on economic activities and resume business activity. Thanks to a transparent and highly efficient economy, reserve funds, along with private investments available due to high business capital security, will maintain living standards, stimulate income and consumption, thereby accelerating economic growth.

In contrast, many developing countries do not have the capacity to develop the COVID-19 vaccine themselves and risk accessing it much later and/or at high cost, leading to the exhaustion of their scarce public budgets. The low investment attractiveness of the economy and the shortage of business capital in the context of the crisis means a massive bankruptcy of enterprises and a critical decline in the standard of living of the population and the level of demand for goods and services. While progressive developing countries such as BRICS and NEX may avoid the risks described, lagging countries are likely to face them and without external support crisis management in these countries may be difficult.

Based on the above, in the context of the 2020 crisis, the problem of studying sustainable development from the perspective of the global economy is relevant in order to reflect the systemic consequences of the economic depression for the world community. The purpose of this work is to study the impact of the 2020 crisis on imbalances in the world economy from the point of view of the problem of its balance and the prospects for its sustainable development.

2 Materials and Method

The problem of imbalances in the world economy has been studied in sufficient detail and is covered in the available publications of Ala’raj et al. (2018), Liu et al. (2020), Munir and Ameer (2018). The prospects for achieving balance and sustainable development of the world economy are discussed in the works of Andronova et al. (2019), Frolov et al. (2017), Goyal and Sergi (2015), Inshakov et al. (2019), Morozova et al. (2019), Petrenko et al. (2018), Popkova et al. (2014), Popkova et al. (2017), Popkova et al. (2016), Ragulina (2019), Ragulina et al. (2019), Sergi (2018), Saveleva (2017), Zavyalova et al. (2018), Sorokina (2017), Shakhovskaya and Arakelova (2017), Artemyeva (2018).
In the context of the economic crisis, a new context of the global economy has emerged and the problem of imbalances in the world economy and the prospects for its balance and sustainability has worsened, which requires its study taking into account the current situation in the world economic system. The methodology of this study is to predict and scenario the values of the indicators of sustainable development highlighted in chapter 2 of this book, as well as to compare the difference between developed and developing countries in each scenario.

The top 6 developed and top 6 developing countries were selected as the objects for study, the most (in terms of the number of confirmed incidence cases) of COVID-19 victims according to the World Health Organization (2020) Data last updated: 2020/6/3, 10:30am CEST and therefore characterized by the highest risks of a protracted recession in the context of the 2020 economic crisis. Statistics for these countries are collected in Table 1.

**Table 1.** Sustainable development statistics in the top 6 developed and top 6 developing countries most affected by COVID-19

| Category       | Country | Global Competitiveness Index 4.0, points 1–100 | Rate of economic growth, % | GDP per capita, US $ | Sustainable Development Index, points 1–100 |
|----------------|---------|-----------------------------------------------|----------------------------|----------------------|--------------------------------------------|
| Developed      | USA     | 83.7                                          | 2.121                      | 64212.535            | 74.5                                       |
|                | UK      | 81.2                                          | 1.606                      | 38965.146            | 79.4                                       |
|                | Spain   | 75.3                                          | 2.045                      | 28619.088            | 77.8                                       |
|                | Italy   | 71.5                                          | 0.800                      | 30941.744            | 75.8                                       |
|                | Germany | 81.8                                          | 1.415                      | 43372.885            | 81.1                                       |
|                | France  | 78.8                                          | 1.749                      | 39121.158            | 81.5                                       |
|                | Average | 78.72                                         | 1.62                       | 40872.09             | 78.35                                      |
|                | Standard deviation | 4.57                                          | 0.48                       | 12700.24             | 2.84                                       |
| Developing     | Brazil  | 60.9                                          | 1.954                      | 11110.946            | 70.6                                       |
|                | Russia  | 66.7                                          | 1.500                      | 11558.835            | 70.9                                       |
|                | India   | 61.4                                          | 7.791                      | 2173.500             | 61.1                                       |
|                | Peru    | 61.7                                          | 3.838                      | 7141.429             | 71.2                                       |
|                | Turkey  | 62.1                                          | 3.428                      | 10645.480            | 68.5                                       |
|                | Iran    | 53.0                                          | 4.454                      | 4927.273             | 70.5                                       |
|                | Average | 60.97                                         | 3.83                       | 7926.24              | 68.80                                      |
|                | Standard deviation | 4.44                                          | 2.24                       | 3832.39              | 3.89                                       |

Source: compiled and calculated by the authors based on the materials of the Institute of Scientific Communications (2020).
3 Results

To determine the sustainable development prospects of developed and developing countries, reference is made to the “under otherwise equal conditions” projections (Fig. 1 and 2).

Figure 1 shows the scenario of “under otherwise equal conditions” for 2020 - in a crisis, the worst (lowest) values of indicators of sustainable development will most likely be realized due to an unfavorable socio-economic environment. The global competitiveness index in 2019 averaged 78.72 points, an economic growth rate of 1.62%, per capita GDP of $40872.09 and a sustainable development index of 78.35 points. The optimistic scenario assumes the smallest reduction in the values of indicators of sustainable development compared to 2019, based on the forecast received - under it, the global competitiveness index will be 77.45 points, economic growth rate 1.34%, GDP per capita $3,8162.97 and the sustainable development index 77.56 points.

The realistic scenario is associated with a large but moderate deterioration in indicators of sustainable development compared to 2019 - under it, the global competitiveness index will be 75.35 points, the economic growth rate is 1.05%, GDP per capita is $31349.79 and the sustainable development index is 76.35 points. The pessimistic scenario assumes the worst of the reasonably probable values of indicators of
sustainable development compared to 2019 - under it, the global competitiveness index will be 73.24 points, the economic growth rate is 0.76%, GDP per capita is $24536.62 and the sustainable development index is 75.13 points.

In 2019, the optimistic scenario in developing countries suggests a global competitiveness index of 60.97 points, an economic growth rate of 3.83%, per capita GDP of $7926.24 and a sustainable development index of 68.80 points. Similarly to developed countries in developing countries, the optimistic scenario assumes the smallest reduction in the values of sustainable development indicators compared to 2019, based on the forecast obtained - under it, the global competitiveness index will be 60.49 points, economic growth rate 3.65%, GDP per capita 6408.97doll. and a sustainable development index of 66.99 points.

The realistic scenario is associated with a large but moderate deterioration in indicators of sustainable development compared to 2019 - under it, the global competitiveness index will be 58.67 points, the economic growth rate is 2.53%, GDP per capita is $4581.14 and the sustainable development index is 64.93 points. The pessimistic scenario assumes the worst of the reasonably probable values of indicators of sustainable development compared to 2019 - under it, the global competitiveness index will be 56.85 points, economic growth rate of 1.40%, GDP per capita of $2753.31 and the sustainable development index of 62.87 points.

Based on the scenarios obtained, the impact of the 2020 crisis on imbalances in the global economy is estimated in Table 2.

**Fig. 2.** Forecast of sustainable development of developed countries for 2020. Source: calculated and built by the authors.
The averaged imbalances in the world economy under different scenarios in the context of the 2020 crisis are calculated in accordance with the materials of Table 2 and are illustrated in Fig. 3.

### Table 2. Impact of the 2020 crisis on global economic imbalances

| 2020 economic crisis scenario | Developed countries | Developing countries | Imbalance (developed/100% /developing)-100% |
|-----------------------------|---------------------|----------------------|---------------------------------------------|
| 2019 (base period)          | 78.72               | 60.97                | 29.11                                       |
|                             | 1.62                | 3.83                 | −57.61                                      |
|                             | 40872.09            | 7926.24              | 415.66                                      |
|                             | 78.35               | 68.80                | 13.88                                       |
| Optimistic scenario         | 77.45               | 60.49                | 28.04                                       |
|                             | 1.34                | 3.65                 | −63.29                                      |
|                             | 38162.97            | 6408.97              | 495.46                                      |
|                             | 77.56               | 66.99                | 15.78                                       |
| Realistic scenario          | 75.35               | 58.67                | 28.43                                       |
|                             | 1.05                | 2.53                 | −58.50                                      |
|                             | 31349.79            | 4581.14              | 584.32                                      |
|                             | 76.35               | 64.93                | 17.59                                       |
| Pessimistic scenario        | 73.24               | 56.85                | 28.83                                       |
|                             | 0.76                | 1.40                 | −45.71                                      |
|                             | 24536.62            | 2753.31              | 791.17                                      |
|                             | 75.13               | 62.87                | 19.50                                       |

Source: calculated and compiled by the authors.

The averaged imbalances in the world economy under different scenarios in the context of the 2020 crisis are calculated in accordance with the materials of Table 2 and are illustrated in Fig. 3.

![Fig. 3. Imbalances in the global economy under different scenarios in the context of the 2020 crisis, %. Source: calculated and built by the authors.](image-url)
As can be seen from Fig. 3, as the 2020 economic crisis deepens, the imbalances in the world economy, expressed in the differences between developed and developing countries, increase. In 2019, developed countries showed 100.26% greater sustainability compared to developing countries. In 2020, under the optimistic scenario, the imbalance will increase to 119%, under the realistic scenario to 142.96%, and under the pessimistic scenario to 198.45%.

4 Conclusion

The research has revealed that the 2020 economic crisis has a negative impact not only on national economies, impeding their sustainable development, but also on the global economy as a whole, increasing its imbalances. Therefore, in order to maintain a balanced world economy, it was necessary to combine the efforts of developed and developing countries to jointly manage the crisis and accelerate the resolution of the crisis.

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