The Social Impact of the Downturn in Business and the New Context of Sustainable Development in the Context of the 2020 Economic Crisis in Developing Countries

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Abstract. Purpose: The purpose of this work is to assess the nature and extent of the social consequences of the downturn in business activity, as well as to predict the new context of sustainable development in the context of the 2020 economic crisis in developing countries.

Design/Methodology/Approach: Regression analysis is used to assess the impact of the social context on the sustainable development of developing economies. It determines the dependence of the manifestations of sustainable economic development on indicators of the social context of sustainable development - the level of poverty, social inequality (Gini coefficient) and average consumption per capita. To assess the social consequences of the decline in business activity in the context of the 2020 economic crisis, forecasts are made “all other things being equal” on the basis of arithmetic and standard deviations for 2019. The worst of the reasonably probable values are determined, which are substituted into the multiple linear regression equations to determine the new context of sustainable development.

Findings: It has been proven that the new social context will be linked to the pronounced negative effects on sustainable development in developing countries. The sustainable development index will decline by 4.64%, GDP per capita by 104.42%, and global competitiveness by 7.38%.

Originality/Value: It is shown that the social consequences of the decline in business activity in the context of the 2020 economic crisis in developing countries will be associated with an increase in poverty by 295.93%, an increase in social inequality (Gini coefficient) by 64.93% and a decrease in average per capita consumption by 60.25%. As a result, there will be an overall decline in sustainable development indicators by an average of 11.26%. Therefore, the new context of sustainable development requires active crisis management measures.
aimed at overcoming the «institutional trap» of alternating business downturn and demand reduction.

**Keywords:** Social impact · Business downturn · New context · Sustainable development · 2020 economic crisis · COVID-19 pandemic · Developing countries

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

1 Introduction

Sustainable development is designed to provide an enabling environment for the functioning and development of human society. At the same time, the social environment defines opportunities and priorities for sustainable development. Crisis events in the global economy, which arose in early 2020 and are likely to continue until the end of this year and even later, have significantly transformed the social landscape of economic systems in the first months of the decline in business activity, and in the medium term these changes will continue and will increase.

The decline in business activity is inextricably linked with a decrease in incomes. During the period of restrictions on entrepreneurial activity to combat COVID-19, one part of the workers lost their jobs and lost most of their income, and the other part of the workers retained their jobs and base salary, also losing income, but to a lesser extent. Measures of state social support have helped to mitigate the trend of declining incomes of the population, but not to completely prevent it.

From the standpoint of sustainable development, this means reducing solvent demand for green and innovative products, as well as further inhibiting economic growth. The process described is an «institutional trap» in that in order to reduce costs and losses, enterprises in times of crisis save on wages, one hundred leads to a decrease in demand, new losses and further savings.

In developed countries, where the most progressive management practices are implemented, and the opportunities for state support are most widespread and actively realized, the “institutional trap” will be quickly overcome by increasing incomes of the population with the cooperation of the state and business. In developing countries, the emergence of the “institutional trap” presents a much greater challenge because of the lack of the necessary resources to quickly overcome it and the anticipated protracted nature of the 2020 economic crisis.

The purpose of this work is to assess the nature and extent of the social consequences of the downturn in business activity, as well as to predict the new context of sustainable development in the context of the 2020 economic crisis in developing countries.
2 Materials and Method

The social consequences of the recession of business activity under the influence of economic crises are discussed in the works of Goyal and Sergi (2015), Pichkov (2016), Popkova and Sergi (2020), Popkova and Gulzat (2020), Popkova and Zmiyak (2019), Zavyalova et al. (2018). Crisis phenomena in a market economy and their impact on the sustainable development of modern economic systems are discussed in the works of Andronova et al. (2019), Frolov et al. (2017), Haabazoka (2019), Inshakov et al. (2019), Petrenko et al. (2018), Popkova et al. (2014), Popkova et al. (2017), Popkova et al. (2016), Pozdnyakova et al. (2017), Ragulina (2019), Ragulina et al. (2019), Sergi (2018), Sergi et al. (2019), Lukyanenko (2017), Borodin and Morozova (2017), Popkova (2017).

These publications form a solid theoretical basis for this study, although the problem of the social consequences of the decline in business activity and the new context of sustainable development in the context of the 2020 economic crisis in developing countries is little understood and requires further research. The top 10 developing countries most affected by the COVID-19 pandemic are among the objects studied in this work, since the impact of the 2020 economic crisis is most pronounced in them. The incidence statistics in these countries are shown in Fig. 1.

Regression analysis is used to assess the impact of the social context on the sustainable development of developing economies. It determines the dependence of the manifestations of sustainable economic development described in chapter 2 of this book on indicators of the social context of sustainable development - the level of poverty, social inequality (Gini coefficient) and average consumption per capita (Table 1).

Fig. 1. Incidence of COVID-19 in the top 10 developing countries most affected by the pandemic: Data last updated: 2020/6/1, 1:55 pm CEST (Source: compiled by the authors based on World Health Organization (2020)).
| Country     | Manifestations of sustainable development | Social context of the economy |
|------------|------------------------------------------|-------------------------------|
|            | Global competitiveness index 4.0, points 1–100 | Rate of economic growth, % | GDP per capita, US $ | Sustainable development index, points 1–100 | Poverty headcount ratio at $3.20/day (% population) | Gini coefficient adjusted for top income (1–100) | Survey mean consumption or income per capita, total population (2011 PPP $ per day) |
| Brazil     | y1                                      | y2                           | y3                      | y4                            | x1                      | x2                      | x3                              |
| Russia     | 66.7                                    | 1.500                        | 11558.835               | 70.9                          | 0.1                     | 43.8                    | 22.2                            |
| India      | 61.4                                    | 7.791                        | 2173.500                | 61.1                          | 27.4                    | 45.6                    | n/a                             |
| Turkey     | 62.1                                    | 3.428                        | 10645.480               | 68.5                          | 0.5                     | 48.4                    | 19.4                            |
| Peru       | 61.7                                    | 3.838                        | 7141.429                | 71.2                          | 8.7                     | 48.2                    | 13.7                            |
| Iran       | 53.0                                    | 4.454                        | 4927.273                | 70.5                          | 3.2                     | 40.0                    | 17.3                            |
| Chile      | 70.5                                    | 2.700                        | 14595.095               | 75.6                          | 1.0                     | 53.3                    | 25.2                            |
| Mexico     | 64.9                                    | 2.710                        | 8692.176                | 68.5                          | 11.7                    | 57.8                    | n/a                             |
| Saudi Arabia | 70.0                                    | 1.991                        | 22650.657               | 64.8                          | n/a                     | n/a                     | n/a                             |
| China      | 73.9                                    | 6.000                        | 9850.988                | 73.2                          | 2.5                     | 41.9                    | 11.6                            |
| Average    | 64.51                                   | 3.64                         | 10334.64                | 69.49                         | 6.63                    | 43.29                   | 13.03                           |
| Standard deviation | 6.04                                    | 1.98                         | 5587.74                 | 4.12                          | 8.61                    | 16.21                   | 9.80                            |

*n.a. – no data in source.

Source: compiled by authors based on materials of Institute of Scientific Communications (2020), UNDP (2020), World Bank (2020).
To assess the social consequences of the decline in business activity in the context of the 2020 economic crisis, forecasts are made “all other things being equal” on the basis of arithmetic and standard deviations for 2019. The worst of the reasonably probable values were determined, which are substituted into the multiple linear regression equations to determine the new context of sustainable development.

3 Results

To assess the social impact of the downturn in the 2020 economic crisis, refer to the forecasting results in Fig. 2, 3 and 4.

In the face of a downturn in business activity under the influence of the economic crisis, an increase in poverty can be expected. According to the forecast in Fig. 2, the largest proportion of the population living on $3.20 a day is 26.25%.

Fig. 2. Poverty rate forecast - proportion of population living on $3.20 per day for 2020, % (Source: calculated and built by the authors.)

In the face of a downturn in business activity under the influence of the economic crisis, an increase in poverty can be expected. According to the forecast in Fig. 2, the largest proportion of the population living on $3.20 a day is 26.25%.

Fig. 3. Forecast of income inequality - Gini coefficient for 2020, % Source: calculated and built by the authors.
In the face of a downturn in business activity under the influence of the economic crisis, an increase in income inequality and a deepening of social stratification can be expected. According to the forecast in Fig. 3, the largest value of the Gini coefficient is 71.40%.

![Graph showing frequency distribution](image)

**Fig. 4.** Forecast of average per capita consumption for 2020, dollars per day (Source: calculated and built by the authors.)

In the face of a downturn in business activity under the influence of the economic crisis, consumption can be expected to decline. According to Fig. 4, the lowest average per capita consumption is $5.18 per day.

The most likely social impacts of the downturn in business activities are identified as a new context for sustainable development in the context of the 2020 economic crisis in developing countries (Table 2).

**Table 2.** A new context for sustainable development in the context of the 2020 economic crisis in developing countries

| Indicator                             | Designation                          | Regression model                  | Correlation, % | Average in 2019 | Forecast value in 2020 | Growth in 2020 compared to 2019, % |
|---------------------------------------|--------------------------------------|-----------------------------------|----------------|------------------|------------------------|------------------------------------|
| Poverty rate: proportion of population living on $3.20 per day | x1 | -- | -- | 6.63 | 26.25 | 295.93 |
| Gini coefficient                      | x2 | -- | -- | 43.29 | 71.40 | 64.93 |
| Average consumption per capita        | x3 | -- | -- | 13.03 | 5.18 | -60.25 |
| Global Competitiveness Index 4.0     | y1 | \( y_1 = 69.64 - 0.42 \cdot x_1 + 0.05 \cdot x_2 - 0.28 \cdot x_3 \) | 45.91 | 64.51 | 59.75 | -7.38 |
| Economic growth rate                  | y2 | \( y_2 = 3.13 + 0.14 \cdot x_1 - 0.01 \cdot x_2 - 0.01 \cdot x_3 \) | 61.19 | 3.64 | 6.23 | 71.42 |
| GDP per capita                        | y3 | \( y_3 = 19741.21 - 343.59 \cdot x_1 - 153.98 \cdot x_2 - 35.50 \cdot x_3 \) | 78.77 | 10334.64 | -456.31 | -104.42 |
| Sustainable Development Index         | y4 | \( y_4 = 64.77 - 0.33 \cdot x_1 + 0.14 \cdot x_2 + 0.08 \cdot x_3 \) | 87.91 | 69.49 | 66.26 | -4.64 |

Source: calculated and compiled by the authors
To illustrate the projected context, the increase in indicators of manifestations and social context of sustainable development in developing countries under the influence of the 2020 economic crisis compared to 2019 is shown graphically in Fig. 5.

![Fig. 5. Growth in indicators of manifestations and social context of sustainable development in developing countries under the influence of the 2020 economic crisis compared to 2019, % (Source: calculated and built by the authors.)](image)

As shown in Fig. 5, the new social context will be linked to the pronounced negative impacts on sustainable development in developing countries. The sustainable development index will decline by 4.64%, GDP per capita by 104.42%, and global competitiveness by 7.38%.

### 4 Conclusion

Therefore, the social consequences of the decline in business activity in the context of the 2020 economic crisis in developing countries will be associated with an increase in poverty by 295.93%, an increase in social inequality (Gini coefficient) by 64.93% and a decrease in average per capita consumption by 60.25%. As a result, there will be an overall decline in sustainable development indicators by an average of 11.26%. Therefore, the new context of sustainable development requires active crisis management measures aimed at overcoming the «institutional trap» of alternating business downturn and demand reduction.

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