THE COVID-19 ECONOMIC CRISIS AND FACTORS PROMOTING THE SMALLER USE OF LIMITED FISCAL RESOURCES

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ABSTRACT
On 11 March 2020 the World Health Organization (WHO) announced the global pandemic, and governments were forced to initiate non-pharmaceutical intervention (NPI) and disease containment measures. Governments had to come up with viable fiscal support measures and respective fiscal aid packages for the health and economic sectors, thus creating a unique opportunity to compare the quality of institutions and government effectiveness to manage, mitigate and lessen an economic crisis and a fall GDP, and measure the possibility of reaching the pre-crisis level of GDP. The analysis raised several issues, because in some countries the change in GDP in 2020 and the speed of recovery from the crisis and the attainment of the pre-crisis level of GDP of 2019 was slower, and at the same time the size of fiscal resources used to tackle the fall in GDP were larger, and the respective public debt to GDP increased more. In order to comprehend why GDP, the fall in 2020, and the use of fiscal resources was smaller, this article aims to establish the role and statistical importance of the level of outstanding public debt, the quality of institutions, and government effectiveness as a driving factor of the respective volume of the fiscal resources used, minimising the size of the change in GDP in 2020 and promoting the recovery of GDP to the pre-crisis level.
KEY WORDS: *fiscal resources, GDP fall and recovery, public debt, quality of institutions, government effectiveness*.

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Introduction

On 11 March 2020, the World Health Organization (WHO) declared the Covid-19 pandemic. This marked the beginning of the largest global epidemiological crisis of the century, and its effects were immediately reflected in economic processes, events and indicators. Policymakers recognised the need to deploy significant fiscal resources to fight simultaneously both the health crisis and the economic crisis. The Covid-19 economic crisis was unique in that it began simultaneously worldwide, literally in a single day. The IMF chief economist Gopinath (2020) referred to it as 'a crisis like no other'. To address it, the largest resources in the history of crisis management were mobilised (Cassim et al., 2020). Countries' budget deficits and government debts surged dramatically (IMF, 2021). An analysis of the increase of public debt to GDP across countries over the last 24 years from 2000 to 2023 revealed a significant rise in public debt. The first wave of this increase occurred during the global financial crisis (GFC) (2008–2010). Following the crisis and the subsequent period of economic recovery (2010–2019), many countries failed to restore their government debt-to-GDP ratio to pre-crisis levels. Consequently, these nations effectively committed themselves to higher levels of borrowing in the future. At the same time, there was considerable uncertainty regarding potential risks to GDP growth and the respective economic consequences.

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After the GFC, several countries managed to reduce government debt to GDP levels, with some even returning to pre-crisis levels (Rimšēvičs, 2022). However, this did not allow scientists to fully confirm the hypothesis about a specific government debt-to-GDP threshold, above which GDP growth would slow, nor to argue unequivocally that the size or level of the debt is a brake on economic growth and will hinder future prosperity.

The Covid-19 epidemiological crisis, followed by the economic crisis, created conditions that allowed the author to explore and analyse whether the size of government debt to GDP led to a larger GDP decline in 2020, and subsequently extended the period required to return to pre-crisis GDP levels. Furthermore, it provided an opportunity to analyse why some countries, which used a lower fiscal resource volume, managed to minimise the decline in GDP during the crisis, compared to others that used a higher fiscal resource volume. National fiscal resources are not unlimited, and every country's fiscal space is limited. The author analysed the development of public debt to GDP level increase during the Covid-19 crisis, the quality of institutions, the correlation of government effectiveness with the decline in GDP in 2020, the further reduction of fiscal space, and the greater use of limited fiscal resources, failing to ensure a smaller decline in GDP or a faster recovery to the pre-crisis GDP level.

1. GDP change and the size of fiscal support

To tackle the challenges of the Covid-19 crisis, the fiscal support to the health system and the economy required substantial additional borrowing on financial markets, and increased the public debt to GDP ratio. The respective budget deficit increased in 2020 due to the sudden decrease in GDP in 2020 and smaller budget revenues in OECD countries. The increased budget deficit additionally forced governments to borrow to satisfy the urgent needs of the crisis.

The discussion over whether elevated debt levels to GDP impede future GDP growth remained unresolved since the GFC. The Covid-19 economic crisis provided a unique opportunity to revisit research about the public debt to GDP level and future growth, and to conceptualise the notion that the higher debt level to GDP during the crisis makes GDP decrease more, thus requiring greater fiscal support and the necessity to borrow and use a larger volume of fiscal resources, questioning the efficiency of the use of limited fiscal resources.

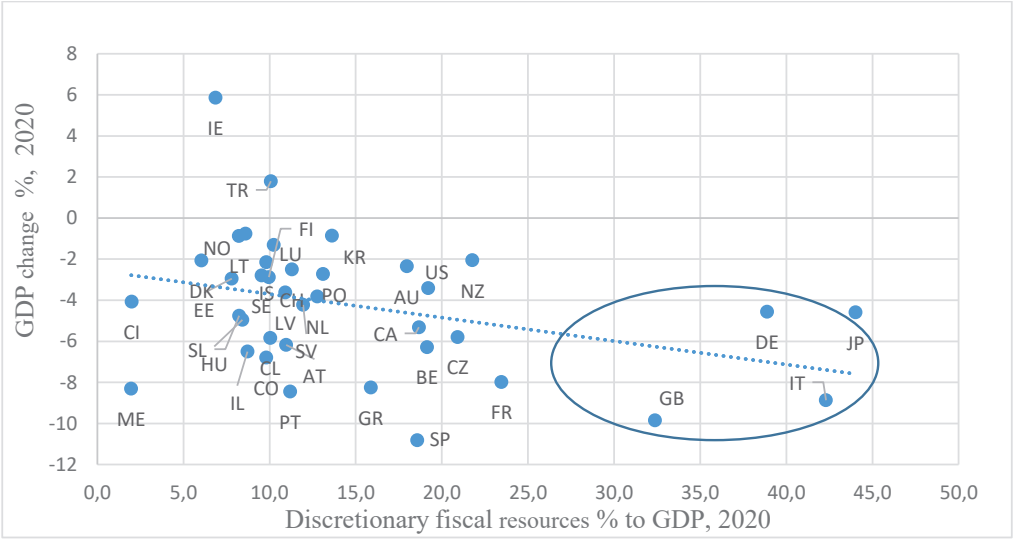

Figure 1. Discretionary fiscal resources and GDP % change in OECD countries in 2020

Source: IMF (2021), WEO (October 2021), the author's calculations.

An analysis of the allocation of discretionary fiscal support to overcome the results of the economic crisis are reflected in Fig. 1. These results reflect the fact that among the OECD countries, Germany, Japan, Great Britain and Italy, fiscal support in 2020 with discretionary fiscal resources was largest (39%, 43%, 33% and 42% respectively).

However, this overwhelming fiscal support did not warrant the slowdown and the fall in GDP and the depth of economic crisis in 2020, thus allowing us to conclude that greater fiscal support does not automatically lead to a smaller fall in GDP in 2020 and a quicker recovery to the pre-crisis level.

2. Public debt, GDP change in 2020, and the attainment of the pre-crisis GDP level

Ghosh et al. (2011) came up with data and a methodology for 23 advanced economies over the period 1970 to 2007, defining the fiscal space as the difference between forecasted future debt ratios to GDP and the respective government debt to GDP level limits. In 2007 there were no signs of considerable risks associated with the challenges of the shrinking fiscal space. Fifteen years later, after two major crises (GFC and Covid-19) of the 21st century, the situation had changed and required us to revisit this issue again, especially under the circumstances of the rapidly increased interest rates and the surging government debt servicing costs, which have serious implications for the outstanding public debt and future fiscal space.

At the end of the global financial crisis (GFC), when countries had significantly increased their debt levels, studies emerged on the level of government debt at which debt and its growth are considered to stimulate GDP growth. The Covid-19 economic crisis provided economists with new data on GDP and outstanding public debt to GDP interaction, hence allowing us to continue the research on an analysis of Reinhart and Rogoff's hypothesis of the debt to GDP relationship to GDP growth studied in *Growth in a Time of Debt* (Reinhart, Rogoff 2010).

A significant number of academic studies on the impact of government debt on GDP growth from various perspectives (Cecchetti, 2011; Baum et al., 2012; Afonso, Alves, 2014; Woo, Kumar, 2015; Chudik et al., 2017) reflected the importance of the growth in government debt relative to GDP and its future development, providing different explanations and justifications, alleging that when debt reaches 67%, 85%, 90% or 95% of GDP, or even higher, the pace of growth of GDP slows down.

Certain research groups and individual authors did not see any future risks or challenges at all, accusing Reinhart and Rogoff of artificially raising alarms and causing unnecessary hype, as well as of incorrect and inaccurate data processing and hasty conclusions (Herndon et al., 2013; Ash et al., 2017; Pescatori et al., 2014; Panizza, Presbitero, 2012).

As the effects of the global financial crisis (GFC) were gradually mitigated, external debt levels stabilised and GDP growth rates recovered, the intensity of discussions regarding the impact of public debt levels on future GDP growth also diminished. The GFC was eventually overcome, and countries' debt-to-GDP ratios slowly stabilised.

Heimberger (2021) argued that the debt-to-GDP ratio is not linked to any single specific GDP growth rate, and that there is no fixed 'magical' or special 90% debt to GDP threshold at which GDP growth would inevitably decline in the future.

Since fiscal space is limited and governments had used substantial resources in the previous GFC crisis (Botev et al., 2016), it is important to reflect on the respective financial position and initial financial stance of the respective governments at the beginning of the Covid-19 crisis to better grasp the new financial positions of the respective governments.

Although countries had different levels of outstanding financial obligations or public debt levels at the beginning of the Covid-19 crisis, and OECD economies, and EMU countries especially, were able to borrow and finance crisis needs without any limits, the relaxed fiscal rules made it possible to compare and analyse the use of the volume of fiscal resources, and to analyse the factors making one group of countries using less fiscal resources, increasing public debt less, with a smaller fall in GDP in 2020 and recovering to the pre-crisis GDP level sooner than the other countries, thus allowing them to save precious fiscal resources and to preserve the fiscal space.

According to the study's data and calculations regarding GDP decline in 2020, and the faster recovery to pre-crisis GDP levels, the initial results were quite surprising. One would expect that rich and developed countries, which had immediate access to financial markets on favourable terms, borrowed significant sums

of money, issued huge guarantees, invested in the capital of many companies and allocated substantial fiscal resources to nearly all sectors of the economy, would have been able to immediately stop the decline in GDP and ensure a smaller decline in GDP in 2020, as well as a faster recovery to pre-crisis levels. However, this did not happen. Countries experienced different levels of GDP decline in 2020, and their recovery speed from the crisis also varied. Why did this happen? To ensure a more effective and meaningful use of the enormous amounts of limited fiscal resources in the future, a careful and comprehensive analysis and study were necessary. The fiscal response to the crisis is very important (Anderson et al., 2020). However, can it be argued that if larger fiscal resources are injected into economies, there will also be better results, i.e. a smaller GDP decline and a faster recovery to pre-crisis GDP levels? Benmelech and Tzur-Ilan (2020) noted that several (especially wealthier) countries allocated significantly larger fiscal resources as a percentage of GDP to save their economies and people from the hardships they faced.

Continuing to analyse the factors that could have contributed to a larger GDP decline in 2020 and a larger volume of fiscal resources used to tackle the crisis, the author conducted a multifactor linear regression (MFLR) analysis, the results of which are presented in Table 1, and found that with a probability greater than 99%, there is a statistically significant negative correlation between the size of government debt and GDP changes in 2020.

Table 1. Government debt and GDP decline in 2020

Dependent variable: GDP growth rate in 2020 (%)						
Factor	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
ln (GDP per capita)	-1.159*** (0.330)	-1.058*** (0.323)	-0.989*** (0.320)	-0.944*** (0.310)	-1.952*** (0.510)	-1.414*** (0.510)
Public debt		-0.037*** (0.010)	-0.037*** (0.010)	-0.037*** (0.011)	-0.037*** (0.010)	-0.037*** (0.010)
NIP stringency			-0.074** (0.033)	-0.080** (0.032)	-0.056** (0.033)	-0.104*** (0.034)
Investment share in GDP (%)				0.124*** (0.043)	0.124*** (0.043)	0.111*** (0.041)
Quality of institutions					0.124** (0.050)	0.096** (0.050)
ln (population)						0.806*** (0.225)
Constant	7.070** (3.124)	7.942** (3.132)	11.053*** (3.374)	7.744** (3.478)	9.401*** (3.474)	6.714** (3.394)
Number of observations	122	122	122	122	122	122

Note: The signs *, ** and *** denote a statistically significant correlation with a probability of 90%, 95% and 99% respectively. Standard errors of the coefficients are in parentheses. The analysis used values of independent variables from the pre-crisis period of 2019, except for the stringency of NPI (2020 average value).
Sources: IMF (2022), WEO (October 2022), the author's calculations.

The results reflected in Table 1 show that government debt has a negative relationship with the GDP change in 2020, indicating that higher levels of government debt relative to GDP were associated with a greater decline in GDP during the pandemic. The relationship is statistically significant at the 99% confidence level across all models. Investment share in GDP has a positive effect on GDP change in 2020, suggesting that countries with higher investment ratios relative to GDP performed better in terms of maintaining economic activity during the crisis. This variable remains statistically significant in Models 4 to 6. Institutional quality has a positive effect on GDP change, with higher institutional quality correlating with a more favourable GDP performance.

Continuing to analyse the factors associated with a larger GDP decline and consequently a longer period of recovery to pre-crisis GDP levels, the author compiled the relevant database for MFLR (multivariate linear regression), and ensured that the MFLR assumptions were satisfied. The results of the analysis are presented in Table 2.

Table 2. Government debt and the duration of recovery to pre-crisis GDP levels

Dependent variable: The duration of recovery to the pre-crisis GDP level (years)						
Factor	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
GDP growth (%)	-0.132*** (0.014)	-0.125*** (0.014)	-0.127*** (0.014)	-0.124*** (0.014)	-0.126*** (0.015)	-0.127*** (0.015)
ln (GDP per capita)	0.075 (0.053)	0.072 (0.052)	0.073 (0.052)	0.147* (0.087)	0.159** (0.091)	0.212** (0.094)
Public debt		0.003** (0.002)	0.004** (0.002)	0.004** (0.002)	0.003** (0.002)	0.004** (0.002)
NPI stringency			-0.003 (0.005)	-0.005 (0.005)	-0.006 (0.006)	-0.008 (0.006)
Quality of institutions				-0.009 (0.008)	-0.009 (0.009)	-0.012 (0.008)
ln (population)					0.019 (0.042)	0.090 (0.044)
Tourists per capita						-0.069** (0.033)
Constant	0.053 (0.500)	-0.116 (0.496)	0.041 (0.551)	-0.097 (0.566)	0.159 (0.580)	0.390 (0.583)
R-squared	0.51	0.53	0.53	0.54	0.54	0.56
Observations	113	113	113	113	113	113

Note: the signs *, ** and *** denote a statistically significant correlation with a probability of 90%, 95% and 99%, respectively. Standard errors of the coefficients are in parentheses. The analysis used values of independent variables from the pre-crisis period of 2019, except for the NPI stringency (2020 average value) and GDP growth rate in 2020.

Source: IMF (2022), WEO (October 2022), the author's calculations.

By conducting the multivariate linear regression (MFLR) analysis, the results of which are shown in Table 2, the author found that with a probability greater than 99%, there is a statistically significant negative correlation between the decline in GDP in 2020 and a longer duration of recovery to the pre-crisis 2019 GDP level. Additionally, with a probability greater than 95%, there is a statistically significant negative correlation between the size of government debt and a longer recovery period to the pre-crisis 2019 GDP level following the 2020 GDP decline. The MFLR analysis results shown in Table 2 also allow the author to conclude that in countries with a higher pre-crisis government debt-to-GDP ratio, there was a larger GDP decline in 2020 and a longer recovery period to the pre-crisis 2019 GDP level. This confirms that countries with a lower government debt-to-GDP ratio in 2019 experienced a smaller GDP decline in 2020 and a faster recovery to the pre-crisis GDP level.

The Covid-19 economic crisis demonstrates not only that countries with a higher debt-to-GDP ratio experienced a larger GDP decline, but also that countries with a higher government debt had a slower recovery to pre-crisis GDP levels. This resulted in the inefficient use of limited fiscal resources, without achieving the necessary outcomes. It took the Eurozone seven years to return to 2008 GDP levels. Even by the end of 2015, Italy's GDP was still 8% lower than in 2008, Spain's was 3% lower, and Greece's was 27% lower (Charumilind et al., 2020).

To illustrate clearly the significant role of the size of public debt before the Covid-19 crisis, the author developed an analysis of the correlation between the debt size of OECD countries and the increase in government debt in 2020. The results in Table 3 demonstrate clearly the strong relationship between the pre-crisis debt size and the increase in public debt during the Covid-19 crisis. This relationship allows the author to conclude that countries with lower government debt levels relative to GDP (using 60% of GDP as a reference point) increased their debt less in 2020, and thus used fewer limited fiscal resources than countries with higher government debt levels relative to GDP before the Covid-19 crisis.

Table 3. The pre-crisis debt size in 2019 and the debt increase in 2020

Country	Debt increase in 2020 (pp)	Size of the debt in 2019 (%)	Country	Debt increase in 2020 (pp)	Size of the debt in 2019 (%)
Ireland	1.4	57.3	Slovakia	10.9	48.2
Luxembourg	2.1	22.1	Iceland	11.2	66.1
Switzerland	3.7	39.8	New Zealand	11.5	32.1
Chile	4.1	28.2	Poland	11.5	45.6
Sweden	4.3	34.9	Israel	11.8	59.5
Latvia	5.6	36.9	Austria	12.3	70.5
Norway	5.6	40.9	Colombia	13.3	52.4
Netherlands	6.1	47.4	Hungary	14.0	65.5
South Korea	6.6	42.1	Slovenia	14.2	65.6
Mexico	6.8	53.3	Belgium	14.4	98.1
Turkey	7.0	32.3	France	17.2	97.6
Czech Republic	7.6	30.1	Portugal	18.3	116.6
Denmark	8.5	33.6	Italy	20.8	134.6
Germany	9.1	59.2	United Kingdom	21.1	85.2
Finland	9.9	59.5	Spain	22.2	95.5
Estonia	10.0	8.6	Japan	22.3	235.5
Australia	10.4	46.6	USA	24.8	108.5
Costa Rica	10.5	56.7	Greece	26.9	184.9
Lithuania	10.5	35.9	Canada	28.7	86.8

Source: IMF (2022), WEO (October 2022), the author's calculations.

The results which are shown in Table 4 allow the author to state that recovery to the pre-crisis GDP level also took place faster in countries not exceeding the 60% debt to GDP margin. It was obvious from the IMF's initial projections for the years 2020 and 2021. Further analysis may be required to study the case of Belgium and the United States. Meanwhile, countries with public debt exceeding 60% of GDP increased their debt significantly more: Hungary by 14%, Slovenia by 14.2%, Belgium by 14.4%, France by 17.2%, Portugal by 18.3%, Italy by 20.8%, the United Kingdom by 21.1%, Spain by 22.2%, Japan by 22.3%, the United States by 24.4%, Greece by 26.9%, and Canada by 28.7%, and hence used larger volumes of precious fiscal resources.

Table 4. Public debt and GDP recovery projections in OECD countries

	IMF 2020. October forecast	IMF 2021. October forecast	IMF 2023. October forecast	Size of debt to GDP in 2019
Country	**Recovery to pre-crisis GDP level**	**Recovery to pre-crisis GDP level**	**Recovery to pre-crisis GDP level**	
Ireland	2021	2020	2020	57. 3
Korea	2021	2021	2021	42.1
Lithuania	2021	2021	2021	35.9
Norway	2021	2021	2021	40.9
Poland	2021	2021	2021	45.6
Australia	2022	2021	2021	46.6
Canada	2022	2022	2022	86.8
Chile	2022	2022	2021	28.2
Czech Rep	2022	2022	2022	30.1
Denmark	2022	2022	2021	33.6
Estonia	2022	2021	2021	8.6
Finland	2022	2022	2021	59.5
Germany	2022	2022	2022	59.2
Hungary	2022	2022	2021	65.5
Israel	2022	2021	2021	59.5
Latvia	2022	2021	2021	36.9
Luxemburg	2022	2021	2021	22.1
Netherland	2022	2022	2021	47.4
New Zealand	2022	2021	2021	32.1
Portugal	2022	2022	2022	116.6
Slovakia	2022	2022	2021	48.2
Slovenia	2022	2022	2022	65.6
Sweden	2022	2021	2021	34.9
Switzerland	2022	2021	2021	39.8
Turkey	2022	2020	2020	32.3
USA	2022	2021	2021	108.5
Austria	2023	2022	2022	70.5
Belgium	2023	2022	2021	98.1
Columbia	2023	2022	2021	52.4
Costa Rica	2023	2022	2021	56.7
France	2023	2022	2022	97.6
Greece	2023	2023	2022	184.9
Island	2023	2022	2022	66.1
Spain	2023	2023	2023	95.5
Great Britain	2023	2023	2023	85.2
Japan	2024	2022	2023	235.5
Mexico	2024	2023	2022	53.3
Italy	2026	2024	2022	134.6

Source: IMF (2020; 2021; 2023), World Economic Outlook, the author's calculations.

The IMF's October 2021 *World Economic Outlook* forecast presented a more optimistic outlook regarding the faster recovery of countries' pre-crisis GDP levels, and, accordingly, the duration of the crisis. It became evident that the GDP recovery forecasts for ten more countries to reach their pre-crisis 2019 GDP levels were revised and improved, indicating that GDP would recover to the pre-crisis levels as early as 2021. It is important to emphasise that, apart from the United States, all these countries had government debt levels not exceeding 60% of GDP. This once again confirms the significance of the government debt-to-GDP ratio in relation to the GDP decline during the Covid-19 crisis, and the speed of recovery to pre-crisis GDP levels.

3. Quality of institutions, government effectiveness and trust in government

Knack and Keefer (1995), in their study on the importance of institutions in ensuring economic prosperity, state: 'Few would dispute the importance of property security, contract enforcement, and the efficiency with which the government provides goods and services and implements policies, as these determine the rate of economic growth.'

Douglas North was one of the first scholars to gradually develop this new socio-economic institutional concept, postulating that all processes take place in a specific environment filled with rules, traditions and assumptions, often without fully realising the complexity of this institutional matrix, its interconnections, and the presence of the relevant 'rules of the game'. North (1991), in his work *Institutions*, defines institutions as follows: 'Institutions are the humanly devised constraints that structure political, economic, and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct) and formal rules (constitutions, laws, and property rights). Throughout history, people have created institutions to establish order and reduce uncertainty in the process of economic exchange.'

The author reveals that the quality of institutions not only increases income, and especially income per capita (Rodrik and Subramanian, 2003; Rodrik et al., 2002), but also cushions the depth of the GDP decrease.

For the further analysis, the author used only OECD country data, to verify whether the statistical relationship still holds for advanced economies. An analysis of various factors of the severity of the Covid-19 economic crisis demonstrates that countries with better quality of institutions score better and have a smaller negative size of GDP % change in 2020 than other countries. Acemoglu and Robinson (2012), in their world-famous book *Why Nations Fail: The Origins of Power, Prosperity and Poverty*, concluded that institutional quality is one of the key factors in economic growth.

The author further studied the impact of the quality of institutions on GDP decline in 2020 and the time required to reach the pre-crisis GDP level. To conduct a comprehensive MFLR analysis, the author used information available from the WEF on the quality of institutions of 122 countries. The author used changes in GDP growth rate in 2020 as the dependent variable, and included institutional quality, public debt, the stringency of NPI, the share of investment per capita, the volume of discretionary fiscal resources, and the share of tourists per capita, as independent variables in the respective models.

The results of the multifactor linear regression (MFLR) analysis, presented in Table 5, show that with a probability greater than 95%, there is a statistically significant relationship between the quality of institutions and GDP decline in 2020. The author also notes that there is a significant relationship with public debt, NPI stringency, the share of investment in GDP, and the volume of discretionary fiscal resources in 2020.

Table 5. Institutional quality and GDP decline in 2020

Dependent variable: GDP growth rate in 2020 (%)						
Factor	**Model 1**	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
ln (GDP per capita)	-1.842** (0.525)	-1.768*** (0.486)	-1.259*** (0.508)	-1.241** (0.490)	-0.940** (0.500)	-0.780 (0.516)
ln (population)	0.466*** (0.220)	0.566*** (0.210)	0.813*** (0.222)	0.734*** (0.214)	0.870*** (0.217)	0.788*** (0.231)
Quality of institutions	0.111*** (0.049)	0.121*** (0.047)	0.078** (0.049)	0.079** (0.046)	0.104** (0.050)	0.099** (0.047)
Public debt		-0.039*** (0.010)	-0.040*** (0.010)	-0.037*** (0.010)	-0.026** (0.011)	-0.024** (0.011)
Stringency of restrictions			-0.100*** (0.034)	-0.093*** (0.032)	-0.110*** (0.032)	-0.110*** (0.032)
Investment share in GDP (%)				0.135*** (0.040)	0.127*** (0.040)	0.127*** (0.038)
Discretionary fiscal resources					-0.109** (0.045)	-0.110** (0.045)
Number of tourists per capita						-0.192 (0.187)
Number of observations	122	122	122	122	122	122

Note: The signs *, ** and *** denote a statistically significant relationship with probability levels of 90%, 95% and 99%, respectively. Standard errors are in parentheses. 2019 data values, except for the GDP growth rate in 2020, NIP stringency and Discretionary Fiscal Support in 2020.

Sources: IMF (2022), WEO (October 2022), the author's calculations.

In order to further expand the subject of the importance of the size of the public debt, quality of institutions, government effectiveness and trust in government, the author developed a data set and the respective analysis, the results of which are reflected in Fig. 2. The author concludes that countries with a smaller size of public debt to GDP, better quality of institutions and government effectiveness in the years 2020 and 2021 borrowed less, hence increasing the outstanding public debt to GDP level less, increasing the debt service costs less, preserving the fiscal space, and using limited fiscal resources more efficiently.

In Fig. 2, Anglo-Saxon countries and Japan stand out clearly as a separate group of aggressive borrowers during the pandemic, hoping that the provision of a larger 'whatever it takes' fiscal resource stimulus at the outset of the crisis would prevent a further GDP fall in 2020, and lessen the borrowing requirements. It did not, and further borrowing was necessary.

Once these countries are removed from the equation, the coefficient of determination is elevated to R2=0,5207. However, the rest of the OECD countries, except Spain, Italy, France and Slovakia, had a more modest appetite to borrow. Fig. 3 allows us to conclude that countries with better quality of institutions, government effectiveness and trust in government and a lower public debt to GDP level in 2019 borrowed less in 2020 and 2021, and thus used smaller volumes of limited fiscal resources and increased the outstanding public debt less. There are clear risks associated with a further increase in the outstanding public debt levels and servicing new elevated debt levels (Fournier, Fall, 2015).

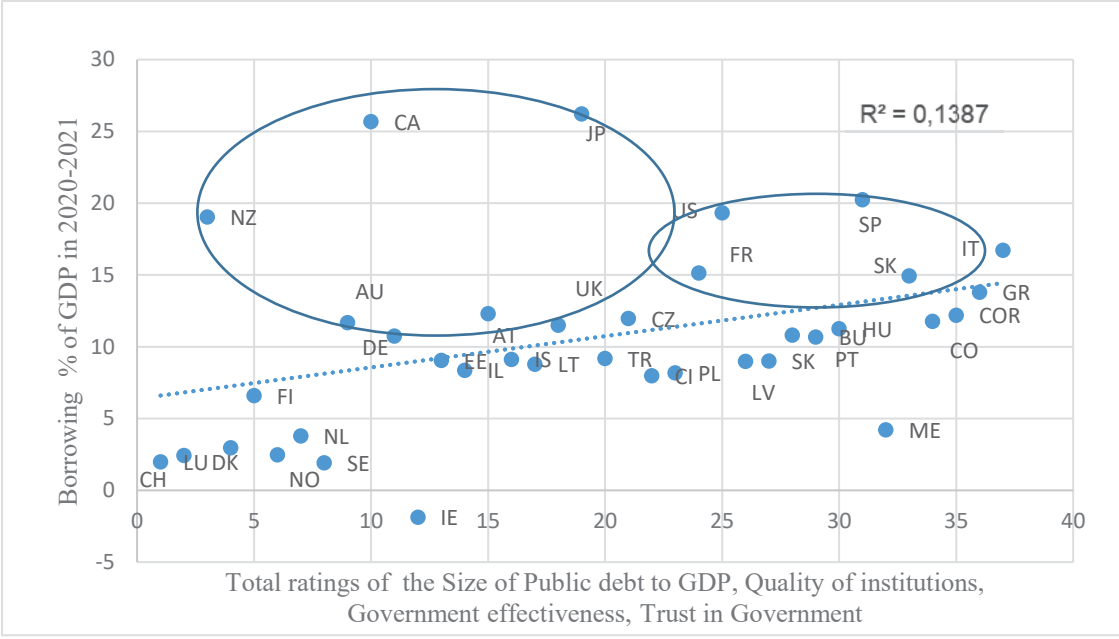

Figure 2. Ratings of size of the public debt to GDP, quality of institutions, government effectiveness, and trust in government in 2019

Sources: IMF (2021), WEO (October 2021), OECD (2021), World Bank (2019), the author's calculations.

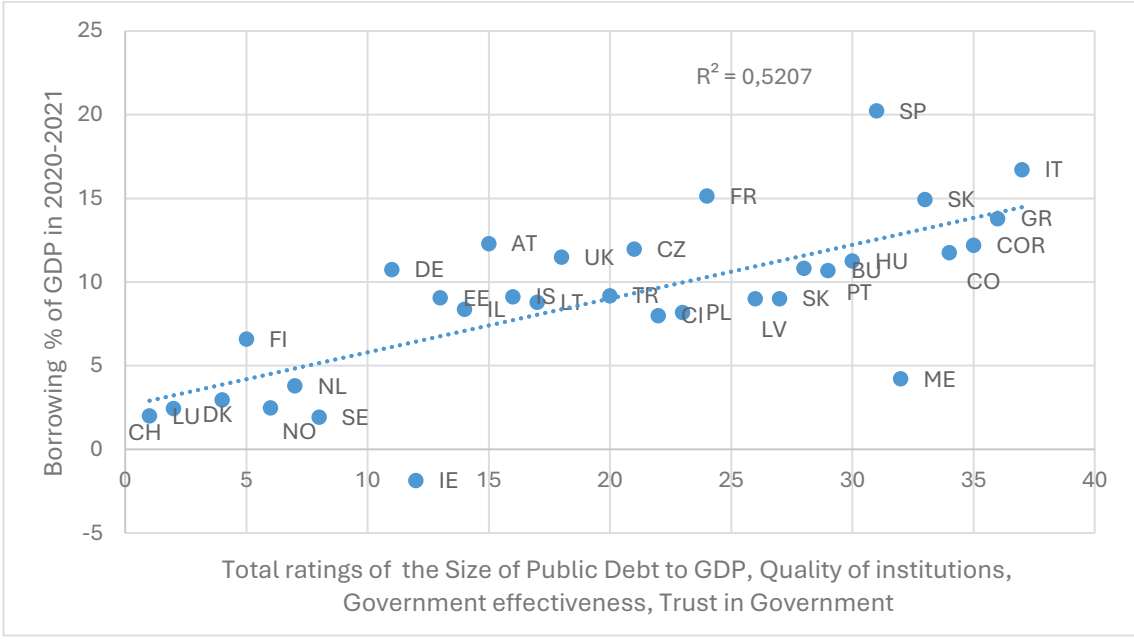

Figure 3. Ratings of size of public debt to GDP, quality of institutions, government effectiveness and trust in government in 2019

Sources: IMF (2021), WEO (October 2021), OECD (2021), World Bank (2019), the author's calculations.

Conclusions and recommendations

Realising the importance of restoring fiscal space and a reduction of the public debt level to GDP ratio to pre-crisis levels before the next crisis, as well as having a crisis management plan, fiscal resources and instruments in place, the author notes the following: a greater use of fiscal resources and a larger increase in public debt compared to other countries is closely related to the quality of institutions, government effectiveness, trust in government and the pre-crisis level of public debt relative to GDP. As a result, some countries increased their public debt less during the crisis, and managed to achieve a smaller GDP decline and a faster return to pre-crisis GDP levels. In contrast, other countries, despite the significantly higher use of fiscal resources, increased their public debt more, and failed to mitigate the decline in GDP in 2020 or achieve a faster return to pre-crisis GDP levels. The author concludes that:

The reliance on discretionary fiscal resources to counteract economic contraction significantly contributed to the increase in the public debt-to-GDP ratio. Even deploying larger discretionary fiscal resources did not secure a smaller GDP decline in 2020 and a faster economic recovery to pre-crisis GDP levels.

Economies with higher pre-pandemic debt levels experienced larger GDP declines and longer recoveries to pre-crisis GDP levels than countries with a smaller pre-crisis debt-to-GDP level, and thus increased their outstanding public debt obligations more. Countries with already elevated public debt-to-GDP levels before the Covid-19 crisis used additional borrowing and larger amounts of discretionary fiscal resources compared to lower debt-to-GDP economies. Countries with lower debt-to-GDP ratios enabled themselves with less use of discretionary fiscal resources and accumulated less additional debt.

Higher institutional quality and government effectiveness provided a smaller output contraction in 2020, thus safeguarding the smaller usage of discretionary fiscal resources, reduced borrowing needs, and slower debt accumulation during the crisis. Using larger amounts of constrained discretionary fiscal resources and raising public debt-to-GDP ratios further introduces the long-term macroeconomic stability risks of slower GDP growth in the future.

Recommendations

1. After any crisis, governments must renew the initial (pre crisis) public debt to GDP level and restore the fiscal buffers and space for the next crisis, to tackle the problems of the next crisis and better and more efficienlty utilise the limited fiscal resources.
2. In order to improve the management of the crisis and use a smaller volume of limited fiscal resources and the accumulation of a larger debt to GDP, governments must improve the quality of institutions.
3. In order to improve the management of the crisis and use a smaller volume of the limited fiscal resources and the accumulation of a larger debt to GDP, governments must improve government effectiveness.

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COVID-19 EKONOMINĖ KRIZĖ IR VEIKSNIAI, SKATINANTYS MAŽESNĮ RIBOTŲ FISKALINIŲ IŠTEKLIŲ NAUDOJIMĄ

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Santrauka

2020 m. kovo 11 d. Pasaulio sveikatos organizacija (PSO) paskelbė COVID-19 pandemiją. Tai žymėjo didžiausios šimtmečio pasaulinės epidemiologinės krizės pradžią, kurios poveikis iš karto atsiskleidė ekonominiuose procesuose, įvykiuose ir rodikliuose. Politikos formuotojai pripažino, kad būtina skirti reikšmingus fiskalinius išteklius siekiant vienu metu kovoti tiek su sveikatos, tiek su ekonomikos krizėmis. COVID-19 ekonomikos krizė unikali tuo, kad prasidėjo vienu metu visame pasaulyje, tiesiog per vieną dieną. Tarptautinio valiutos fondo (TVF) vyriausioji ekonomistė G. Gopinath (2020) ją pavadino „krize, kokios dar nebuvo“. Siekiant ją įveikti, mobilizuoti didžiausi istorijoje krizės valdymo ištekliai (Cassim ir kt., 2020). Šalių biudžeto deficitai ir vyriausybių skolos gerokai išaugo (TVF, 2021). Analizuojant viešosios skolos santykio su BVP augimą įvairiose šalyse per pastaruosius 24 metus (nuo 2000 iki 2023 metų) pastebėtas reikšmingas viešosios skolos didėjimas. Pirmoji šito augimo banga įvyko per pasaulinę finansų krizę (PFK) (2008–2010 m.). Po krizės ir vėlesniu ekonomikos atsigavimo laikotarpiu (2010–2019 m.) daugelis šalių nesugebėjo sugrąžinti savo valdžios sektoriaus skolos ir BVP santykio į prieškrizinį lygį. Dėl to šios valstybės faktiškai įsipareigojo ateityje skolintis didesnėmis apimtimis. Kartu buvo didelis neapibrėžtumas dėl galimų BVP augimo rizikų ir jų nulemtų ekonominių pasekmių. Po PFK kai kurioms šalims pavyko sumažinti valdžios sektoriaus skolos lygį, o kai kurios netgi sugrįžo į prieškrizinį lygį (Rimšēvičs, 2022). Tačiau tai neleido mokslininkams galutinai patvirtinti hipotezės dėl konkrečios valdžios sektoriaus skolos ir BVP santykio slenksčio, virš kurio BVP augimas sulėtėtų, nei neabejotinai teigti, kad skolos dydis stabdo ekonomikos augimą ir trukdo būsimai gerovei. COVID-19 epidemiologinė krizė, po kurios sekė ekonomikos krizė, sudarė sąlygas autoriui analizuoti, ar valdžios sektoriaus skolos dydis, palyginti su BVP, lėmė didesnį BVP nuosmukį 2020 m. ir vėliau pratęsė laikotarpį, kuris buvo būtinas norint sugrąžinti prieškrizinį BVP lygį. Be to, tai sudarė galimybę analizuoti, kodėl kai kurios šalys, kurių mažesni fiskaliniai ištekliai, sugebėjo minimizuoti BVP nuosmukį krizės laikotarpiu, palyginti su tomis, kurios išnaudojo didesnius fiskalinius išteklius. Nacionaliniai fiskaliniai ištekliai nėra begaliniai, kiekvienos šalies fiskalinė erdvė ribota. Autorius analizavo viešosios skolos ir BVP augimo raidą COVID-19 krizės laikotarpiu, institucijų kokybės, valdžios efektyvumo koreliaciją su BVP nuosmukiu 2020 m., tolesnį fiskalinės erdvės mažėjimą ir didesnį ribotų fiskalinių išteklių naudojimą, nesugebant užtikrinti mažesnio BVP nuosmukio ar spartesnio prieškrizinio BVP lygio atsistatymo.

RAKTINIAI ŽODŽIAI: *fiskaliniai ištekliai, BVP mažėjimas ir atsigavimas, valstybės skola, institucijų kokybė, vyriausybės efektyvumas.*

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