Comparing G20's cash canon in 2020

Contrasting G20's government support during the Coronavirus pandemic

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Summary

- In this report we compare additional government spending by G20 countries during the Covid-19 pandemic in 2020
- The advanced G20 countries have really fired up the cash canon compared to emerging G20 economies, who are more constraint in increasing their government spending
- Our comparison of government expenditures over the last decades shows a shift in sizes of government expenditures within and among G20 countries
- While China showed the largest increases in government spending over the last decades, in 2020 the US had the highest total additional government spending, both in absolute and relative terms
- Without the sizeable government spending, G20's total contraction could have been 4 times more severe

Government support in 2020

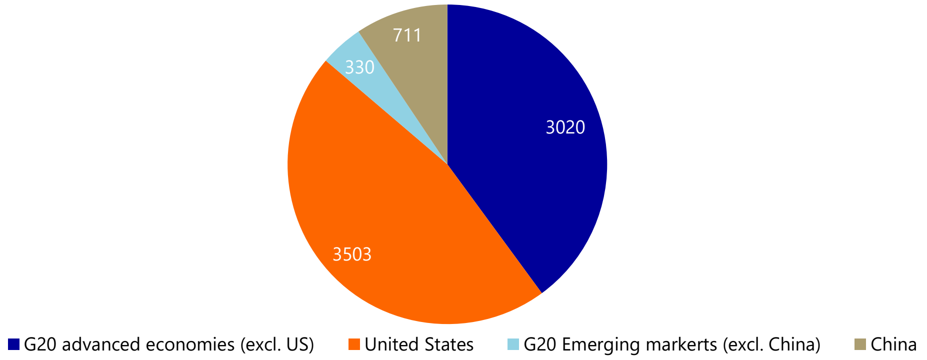
The world has been suffering from the global corona pandemic since January 2020. Governments have obviously tried to ease the linked economic pain with huge fiscal support packages – as we had predicted. After a year of such spending, we believe it is time to compare these policy responses. Our aim is to compare additional government support by G20 countries as a result of the Covid-19 pandemic in order to show material differences among G20 countries as well as shifts in spending patterns within/ among G20 countries. To answer questions like: How much did governments spend exactly to limit Covid's economic damage in absolute terms? How much is their spending relative to the size of their economy, and compared to other countries? And: Do countries show different spending patterns than in the last decades?

This study is a follow up of our previous study in which we concluded that the variety of support responses are large, but also differ in size because of country-specific fiscal (and monetary) constraints. In contrast to the previous report, our focus here is on government support measures only. Monetary support plays an important role as to how governments *pay* for this fiscal support, but is not in scope here. We also exclusively consider the G20 members: since they are responsible for more than 80 percent of world GDP, we believe this is sufficiently comprehensive.

Hey big spender!

Globally, governments have 'spent' almost USD8 trillion to support their economies during the pandemic (Figure 1). These are above-the-line[1] additional government spending or foregone revenues in both the health and non-health sectors that governments have announced or taken in a response to the global corona pandemic as of December 31, 2020, summarized by IMF.

Figure 1: Most US dollars spent and announced on additional fiscal support by the US (billion USD)

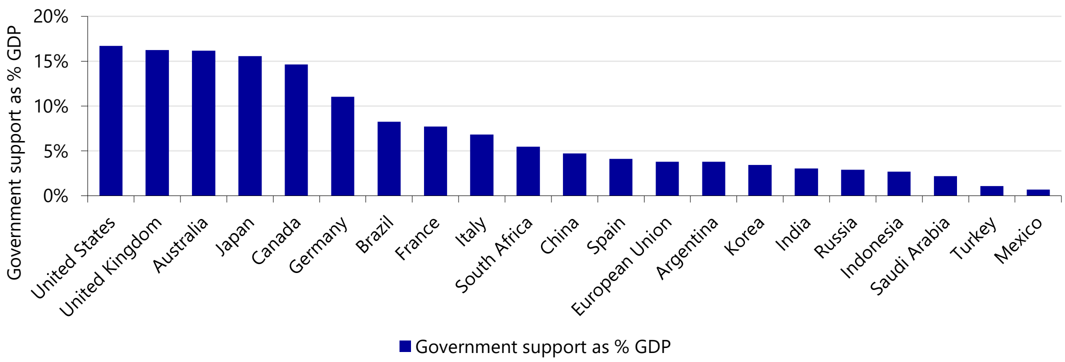


Source: IMF

Note: Additional fiscal spending or foregone revenues are above-the-line measures in both the health and non-health sectors

Of all G20 countries, the US tops the list of 'big spenders' with additional expenditures of around USD3.5 trillion, which is 45% of additional expenditures among G20 countries (while US 'only' has a GDP share of around 27% of G20 GDP). Correcting for the size of the economy, the US is still among the countries with the largest additional government spending (Figure 2), followed by the UK, Australia, Japan, Canada, Germany, Brazil, and France. **Hence, we can conclude that of the G20 countries, it is the advanced G20 economies that have fired up the cash canon.**

Figure 2: Government support in 2020 as percentage of GDP



Source: Source: IMF

Note: Additional fiscal spending or foregone revenues are above-the-line measures in both the health and non-health sectors.

[1] We choose to only take into account the above-the-line measures as they directly impact economic activity. The impact of below-the-line measures, such as loans, equity stakes and guarantees, is more ambiguous. Their impact also depends on how much of it is spent by the receivers of the measure.

A break with the past

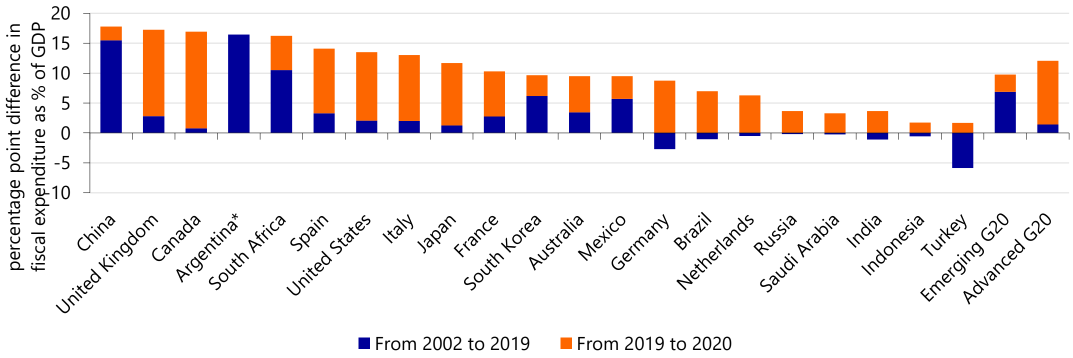
In 2020 advanced G20 economies were the biggest fiscal spenders to combat the corona crisis, as underlined in both Figures 1 and 2. This holds both in absolute figures and when compared to the size of their economy. This is remarkable since it seems to break an 18-year long standing trend: Figure 3 shows the differences of fiscal expenditure as percentage GDP between different time periods. Illustrating the size of government expenditures over the past eighteen years (dark blue) as well as the sheer magnitude of the increase in government spending in 2020 (orange).

We observe an interesting difference between the changes in government spending in emerging economies and advanced economies (shown at the extreme right of Figure 3). The dark blue part of the bar shows that over the past eighteen years, up until 2020, the fiscal spending-to-GDP ratio of advanced economies did not change that much, in contrast to the fiscal spending ratio of the emerging G20 countries. Which underlines the magnitude of spending by advanced economies in 2020.

The increase of additional government expenditures is confirmed when we look at individual countries. Many emerging G20 economies increased their fiscal spending between 2002 and 2019 by more than 5 percentage points. Which is a lot compared to advanced G20 economies of which only South Korea increased government spending by more than 5 percentage points the last two decades[2].

Most noteworthy is China. In 2019, China's fiscal expenditure as percentage of GDP, was around 15 percentage points above its fiscal expenditure in 2002. Or putting it in another way: In 2002 China's fiscal expenditure was around 18 percent of its GDP, whereas in 2019 this was around 34 percent of GDP.

Figure 3: Historic increase in government spending for G20 countries



Source: IMF Fiscal Monitor * No 2020 data available for Argentina

But then came Covid-19. The world tumbled into the pandemic crisis which led to an explosion of additional spending by advanced economies. Government spending in the advanced economies exploded and has now reached its **highest level** in – at least – two decades. (Figure 4).

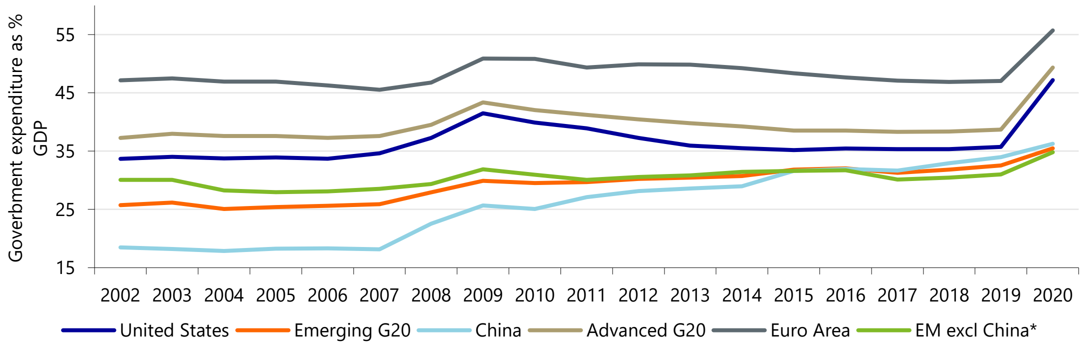
Again, when we look at individual countries in Figure 3 we see increases of up to 10 percentage points in the UK, Canada and the US. Which is much more than India, Indonesia and Russia none of whom even reach a 5 percentage points increase. It is interesting to note that China did not increase spending nearly as much as developed G20 countries in 2020, in contrast to its spending pattern over in the previous two decades.

[2] Advanced G20 countries are: Australia, Canada, France, European Union, Germany, Italy, Japan, South Korea, Spain, United Kingdom and United States. Emerging G20 countries are: Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa and Turkey.

Figure 4 enables us to derive some additional insights with regard to government spending. First of all, it underlines our earlier observation that emerging G20 economies increased their government spending during the last decades, most notably China (light blue). Secondly, it also shows that advanced G20 economies did not increase their government spending by much: until 2020 it stabilized at around 40 percent of GDP. And finally: the increase in government spending by advanced G20 economies was much steeper in 2020 than during the last two decades, including the global financial crisis in 2008.

Figure 4 also enables us to compare governments' reactions in the Covid-19 crisis and the great financial crisis (GFC) in 2008. China increased its fiscal spending in 2008 by more than it did in 2020[3]. For the US, and many other advanced G20 countries, this was the other way around. And while the advanced G20 economies did increase their government spending in 2008, they later reduced it. China on the other hand continued to increase its fiscal spending after the jump during the GFC. The additional stimulus packages in the US and ambition to deleverage by China might indicate that the roles will be reversed in the coming years.

Figure 4: History of government expenditures



Source: IMF Fiscal Monitor, RaboResearch

*Note: EM excl. China is calculated average of Brazil, India, Indonesia, Mexico, Russia, South Africa, Turkey, Saudi Arabia

The power of government support

It is abundantly clear that governments have increased expenditures enormously. But did it have an effect? In order to give a rough estimation of the effect of additional spending on GDP, we deducted the size of the nominal government support from nominal GDP (Figure 5). This gives us an estimate of what GDP could have been without the extra spending by the government (going forward we will call the nominal GDP without stimulus "constructed nominal GDP").

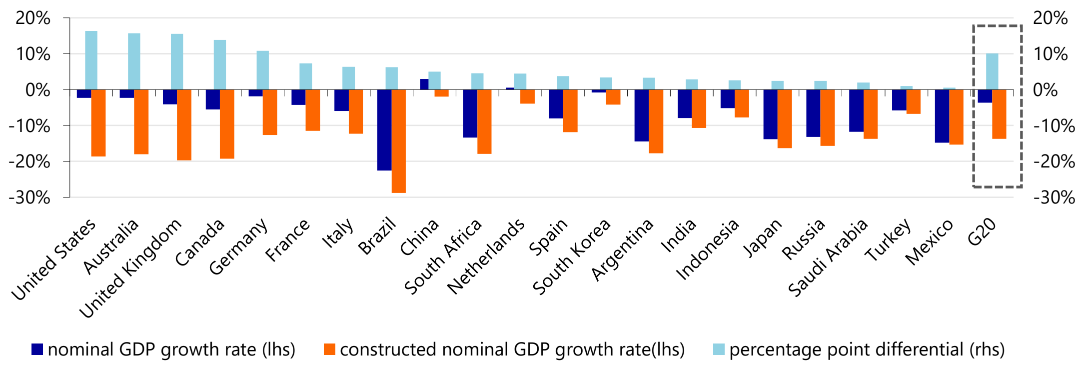
By comparing the constructed nominal GDP growth rate to the actual recorded GDP growth rate, we get an indication of the effect of additional fiscal stimulus on economic growth. Although it is a simplification, it gives a reasonable: 1) indication of the differences in economic growth rates in a scenario without additional stimulus; and 2) comparison between countries' growth rates, while taking relative differences in additional stimulus into account. A more detailed rationale behind this calculation can be found in Box 1.

[3] China increased government expenditure 3.1 ppts from 2008 to 2009 and 2.3 ppts from 2019 to 2020. US from 4.2 ppts from 2008 to 2009 and 11.5 ppts from 2019 to 2020.

Box 1: Impact of discretionary measures on GDP

In case of crisis governments can increase spending or decrease taxes in the form of discretionary measures. Since governments take these measures in addition to the existing budget, in most cases they need to seek approval from their house of representatives. These discretionary measures are not part of GDP components as such (government consumption or government investment), and they are transferred into the economy via a different route. In case of the Covid crisis, for example, via the job keeper programs, loan moratoriums and tax advantages that relief the costs for companies and individuals so they maintain a certain degree of income or revenue. This additional support allows them to maintain a certain level of demand which, in turn, positively influences, for example, private consumption and investment. In other words, support given to employees in the food services sector (financed mostly by the issuance of government debt or through savings), prevented demand from collapsing altogether. In this way the increased government spending via discretionary measures also increases GDP growth, all other things equal. In an effort to measure what GDP growth in 2020 would have been without the additional government spending, we have subtracted the discretionary measures in nominal terms from nominal GDP to end up with the variable *constructed nominal GDP growth rate* as shown in Figure 5.

Figure 5: GDP growth rates with(out) additional government spending in 2020



Source: World Bank, IMF Fiscal Monitor, RaboResearch

Figure 5 shows the actual 2020 nominal growth rates (dark blue), constructed nominal GDP growth rates (orange) and percentage point differential (light blue). The countries are ordered from largest percentage points (ppts) differential (left) to lowest ppts differential (right), except total G20. This is shown far right.

A few points stand out. Firstly, without additional stimulus, the nominal G20 GDP growth rate would have been far worse in 2020: -13.8% instead of -3.7%. This is a massive 10 ppts. difference representing **a contraction almost four times bigger**. Similarly, IMF mentions that contractions could have been three times bigger in their most recent economic outlook.

Secondly, we see particularly large differences in nominal GDP growth and constructed nominal GDP growth in developed economies, as we find almost all developed economies on the left side of the graph. This seems logical since we already showed in Figure 2 that developed economies did most of the spending. However, what if these countries had not acted so forcefully? Looking at the light blue bars we observe that the difference between nominal GDP growth rate and constructed nominal GDP growth rate is more than 10 ppts for the top 5 (US, Australia, UK, Canada, Germany). Percentage-wise this means we would have seen economic contractions of almost 20% in the US, UK, Japan, Canada and Australia, which would be **almost 4 to 8 times bigger** than the nominal GDP growth rates: US (-2.3%), UK (-4.1%), Canada (-5.5%) and Australia

(-2.3%). While the largest European countries: Germany (-1.8%), France (-4.3%), Spain (-8%) and Italy (-6%) would have contracted by more than 10%.

Thirdly, we observe large contractions in nominal GDP in Brazil (-22.6%), Russia (-13.2%), Argentina (-14.9%), South Africa (-13.4%) and Mexico (-14.8%) while the differences between GDP nominal growth rate and constructed nominal GDP growth rate are small. This can be partly contributed to large swings in valuation of their local currency. The fact that many emerging markets suffered a major depreciation of their currencies, like Argentina (-29%) Brazil (-23%) and Turkey (-20%), partly explains the large contractions in nominal GDP in USD, which we use in this study[4]. Furthermore, the smaller difference between nominal GDP growth rate and constructed nominal GDP growth rates in these emerging markets again underlines the inability of these countries to stimulate or support their economy as much as the more advanced economies, to offset the economic impact of the lockdown restrictions.

Finally, China would still only have contracted by 2% in our constructed scenario, which is a rather small difference with the actual growth (3%) when compared to differences in western developed economies (although in itself a 5ppts contraction is still huge for a country). This again signals that there might be a shift in relative government expenditures of China compared to other countries, which is in line with our earlier observation on the basis of Figure 3 and Figure 4.

Conclusion

The comparisons we made show that governments have fired up the cash canon by introducing support packages in a magnitude of almost 20% of GDP. Governments in advanced economies were able to provide larger support packages than emerging economies, as the latter are more constrained in their spending. **The fact that the more advanced economies came with such large stimulus packages in 2020 breaks with the trend of the last two decades when government expenditure growth was highest in China.** This new dynamic might continue in the coming years as the US recently announced additional support packages in the US while China has the ambition to deleverage in the coming years.

Furthermore, we conclude that extensive additional government expenditures to combat the Covid crisis have prevented more severe negative economic consequences. Economic contraction could have been more than 5 times as severe (in nominal terms) in some advanced economies and probably prevented (parts of these) societies from collapsing.

We've answered questions: How much did governments spend? And how much is their spending relative to the size of their economy, and compared to other countries? But uncertainty remains as countries are still facing new waves of the virus. This logically leads to new questions like: what are the consequences of the large increases in government expenditures and how do these affect the fiscal headroom and flexibility of governments to further combat any negative developments? These developments will be very intriguing to monitor as 2021 progresses.

[4] See appendix for FX performance of all G20 currencies vs. USD

Appendix

Table 1: FX performance G20 countries versus USD

Country, currency	*Performance against USD in %**
Argentina, ARS	-28.79%
Brazil, BRL	-22.60%
Turkey, TRY	-19.93%
Russia, RUB	-16.03%
Mexico, MXN	-5.18%
India, INR	-2.48%
Indonesia, IDR	-0.58%
Saudi Arabia, SAR	0.00%
Canada	1.85%
United Kingdom, GBP	3.24%
Japan, JPY	5.29%
South Korea, KRW	6.19%
China, CNY	6.67%
Euro Area, EUR	9.04%
Australia, AUD	9.84%

* negative value indicates depreciation of local currency

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