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Comparing the Macroeconomic Policy Measures across the G20. The Crisis Response is a Long-Term Marathon

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European Commission
Directorate-General for Economic and Financial Affairs

Comparing the Macroeconomic Policy Measures across the G20

The Crisis Response is a Long-Term Marathon

Lucia Granelli and Matteo Brunelli

Abstract

The international community acted swiftly to respond to the outbreak of the COVID-19 pandemic. In April 2020, G20 Finance Ministers and Central Bank Governors (FMCBGs) endorsed the "G20 Action Plan Supporting the Global Economy Through the COVID-19 Pandemic". This paper compares and assesses the economic policy response to the COVID-19 crisis across all the G20 members, with a focus on the measures undertaken during the first six months after the outbreak of the pandemic. The analysis was made on the basis of the policy trackers developed by the IMF and OECD, on the mandate from the G20. The information retrieved and compiled from these sources was further augmented with information coming from other databases, reports, working documents, policy notes, and the authors' own analytical work as appropriate. Building on the analysis developed, the paper distils a series of key take-aways on the global policy response to the COVID-19 pandemic.

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1. INTRODUCTION

In April 2020, G20 Finance Ministers and Central Bank Governors (FMCBGs) endorsed the "G20 Action Plan Supporting the Global Economy Through the COVID-19 Pandemic". This document set out the key principles guiding the G20 response to the pandemic and commitments to specific actions for driving forward international economic cooperation. In October 2020 and April 2021, G20 FMCBGs endorsed two updates of the G20 Action Plan, to make sure the G20 could properly navigate the different stages of the crisis and looked ahead to a strong, sustainable, balanced, and inclusive global economic recovery.

In this framework, this paper compares and assesses the initial economic policy response to the COVID-19 pandemic from all the G20 members. To this end, a compilation (found in Annex II) and comprehensive analysis of the information gathered in the IMF and OECD policy trackers, set up as a response to a G20 request in April 2020, was undertaken, focusing on the first 6 months of the pandemic (March – September 2020) when bulk of measures were adopted. Additional information on fiscal policy from the IMF Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic, and from the Oxford Stringency Index database for the health policy-related information was utilised. Authors' own calculations have also been used as needed.

This paper is structured in four parts. This first section provides an overview of the paper, its main conclusions, and explains the reasons why this comparison and assessment of the policy response to COVID-19 across the G20 is relevant. Section 2 sets the state of play and discusses the immediate impact of the pandemic and the following containment measures in G20 economies. Section 3 offers an overview of the initial economic response to the pandemic shock by G20 members on both the fiscal and monetary side. Section 4 digs deeper into the economic response and provides an initial assessment, with a particular attention to fiscal policy decisions. Section 5 concludes by highlighting the key takeaways that come from the overall analysis.

Before foreshadowing these key takeaways, it is necessary to highlight the underlying motivations and logic that have driven this work. First, comparisons and possible assessments made on the magnitude of the economic reaction to the COVID-19 pandemic can help to define some key principles that have driven the policy reaction to the outbreak of the pandemic. Furthermore, as G20 countries are different (including in terms of level of development, fiscal space and economic structure), and differently affected by the pandemic (including in terms of intensity and stage of the pandemic – see Annex I), a deeper level of analysis may be therefore essential in understanding the extent of the economic shock, and the overall support given by governments and central banks, also in the context of the scale of the health-driven response.

Second, the necessity for a deeper level of analysis is not only about understanding the past. It can also provide an important frame of reference for planning medium to long-term futures of the economy. From the EU point of view, analysing the different policy decisions across G20 members can provide important insights for the recovery phase where the economy needs to be stabilised and the damages of the COVID-19 pandemic repaired. Given the unprecedented level of fiscal and monetary stimulus, it would be importante to use the COVID-19 policy response to address systemic underlying transformations (digital and green above all), increase overall resilience to future shocks, and reduce risk-enhancing inequalities.

Third, although comparisons with the great financial crisis (2008-2009) are to be done with caution given the different circumstances and nature of the crises, the greater role that fiscal policy has had in the current response compared to the global financial crisis allows for a better understanding of fiscal policy coordination. This allows for deeper insights on the fiscal policy support packages adopted by the G20 members. The attention to fiscal policy is justified by the fact that the economic context has changed significantly from 2008: (i) some of the traditional tools to conduct monetary policy have faced some constrains due to the Zero Lower Bound (ZLB) scenario experienced in some G20 members, (ii) interest rates, inflation, and growth in advanced countries have remained for some time on a relatively low level from an historical perspective, with possible important consequences on the sustainability of public debt over the long term, and (iii) G20 members have already undertaken a massive fiscal stimulus (almost USD 17 trillion including below and above-the-line measures) to support firms and households affected by the outbreak of the COVID-19 pandemic. There is therefore merit in analysing with particular attention the fiscal dimension of the response. Of course, this focus has not been done at the expense of analysing monetary policy, which has without a doubt played an essential role in the economic response.

Fourth, looking across G20 members, this paper may also allow identifying the policy areas where more international coordination would be needed. While immediate fiscal coordination could have been seen as not essential in the initial emergency phase as all countries were in whatever-it–takes mode, this aspect could become more relevant in the after-math of the crisis, when dealing with the unprecedented levels of debt worldwide. In developing countries, this coordination could be translated in issues involving debt suspension and potential debt restructuring in certain cases; while in advanced economies with rather high levels of debt (overhang) and relatively lower growth, international coordination could be necessary to spring out from the specter of a secular stagnation scenario by maintaining debt sustainability while strengthening growth.

The in-depth analysis of the fiscal and monetary response on the part of G20 members to the economic fallout of the Covid-19 pandemic that will be presented in the following sections highlight five key take-aways. First of all, looking forward it remains imperative to manage properly the policy support, avoiding too early or late withdrawal. Second, lifting and sustaining higher economic growth should be paramount for all governments, also to ensure the sustainability of the increased amount of public debt, which globally has reached a level just below 100% of the debt-to-GDP ratio. Structural reforms should drive towards strong, sustainable, balanced and inclusive growth over the long-run, most notably, but not only, in the digital and green sphere. Third, action is required to systematically address preparedness against old and new types of risks, to increase the resilience of societies and economies for future crises caused by economic (e.g. high public debt) or other (e.g. climate, digital, further health) risk factors. Fourth, multilateralism and international coordination should be strengthened, both to ensure a successful recovery process and to address significantly different or worsening global economic challenges, from the breaking down of essential supply chains to addressing the sustainability of systematically higher debt levels. Finally, some lessons from the internal EU response could be relevant also at international level and be internalised by the G20.

2. STATE OF PLAY: UNDERSTANDING THE IMMEDIATE IMPACT OF THE PANDEMIC AND CONTAINMENT

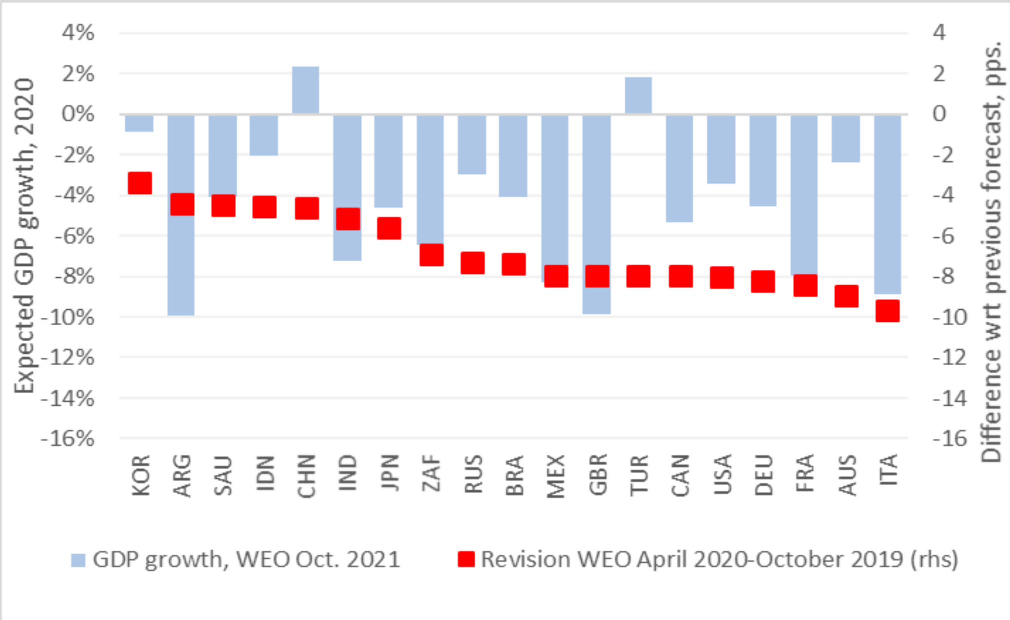
The COVID-19 pandemic has spread in all G20 members, but with a different intensity and at different times. China was the first to be hit hard, with European countries to follow, then the pandemic spread to the US and Canada, to be followed by the Latin American and the Indian subcontinent. The resulting economic shock equally varied across the G20 (Figure 1). On the basis of the expected GDP growth for 2020 (according to the IMF WEO October 2021), G20 members can be grouped in three sets. A first group is made of countries whose GDP growth remained still positive (China) or turned only slightly negative – that is with a drop in GDP lower than 2% (China, Turkey, and South Korea). A second group of countries is constituted by countries whose GDP fall was between 5 and 5 percentage points (pps.) (Indonesia, Australia, Russia, USA, Brazil, Saudi Arabia, Germany, and France). The last group is made up of those G20 members whose fall in GDP was larger than 5 pps. (Canada, South Africa, India, France, Mexico, Italy, UK and Argentina).

The negative impact of the COVID-19 pandemic on the GDP growth expected in 2020 was positively correlated with the strength and depth of the pandemic. As shown in Figure 1, between October 2019 and April 2020, all G20 members except South Korea saw their GDP forecast revised downwards by at least 4 pps, and the majority of them by more than 7 pps. This revision applied to all G20 members in a quite similar way and did not seem related to the pre-crisis growth outlook of the different economies. This revision was usually larger than the actual fall in the GDP growth in 2020, except for Argentina, India, and UK. Figure 2 shows also that there was a positive correlation between the GDP growth and the number of confirmed cases and deaths (dimension of the bubble) due to the pandemic. A larger number of confirmed cases and deaths went with lower GDP growth, pointing to the existence of an interconnection between the epidemiological and economic situation in 2020.

Interestingly, the GDP growth in 2020 seemed to be more significantly correlated with the strength than with the length of containment measures across G20 members (Figure 3). An important tool for analysing the strength of the lockdown response is the Stringency Index developed by the University of Oxford. This index systematically collects information on several different common policy responses that governments have taken to respond to the pandemic based on 17 indicators such as school closures and travel restrictions. While there is no definitive answer as on to why this is the case and it is still early to assess whether the differences in containment policies had a significant and lasting impact on the recovery trajectory, there are several potential explanations that have been highlighted by the literature. The first is that the impact of the pandemic could be larger in more open economies, for a given level of containment policies. As shown by Fernando and McKibbin (2020), if countries are interdependent through linkages in production inputs, final goods trade or financial flows, the COVID-19 shock induces a negative labour supply shock, disruption of production networks, shift of consumption preferences towards domestic goods, and a rise in equity and country risk premia. This impact may hence be larger the more open economies are, regardless of the specific containment measures. The second likely explanation is the role of consumer behaviour, which can make domestic demand plummeting even in case of no full lockdown imposed. As shown in models combining epidemiological and macroeconomic considerations (the so-called SIR-macro models), a no-action strategy leading to “herd immunity” could have devastating costs (e.g. Regalado, 2020; Gourinchas, 2020; Stock, 2020; Eichenbaum et al 2020; Kaplan, Moll and Violante 2020; Glover et al. 2020). A third explanation may depend on the different speed at which G20 members initially responded to the pandemic, revealing the existence of a learning curve in how to deal with the pandemic shock. Those that were hit first (or earlier) by the virus took initially smaller actions or cumulated a series of decisions longer drawn-out in time, whereas those that where the epidemic started later took larger measures and in a shorter time (Annex I).

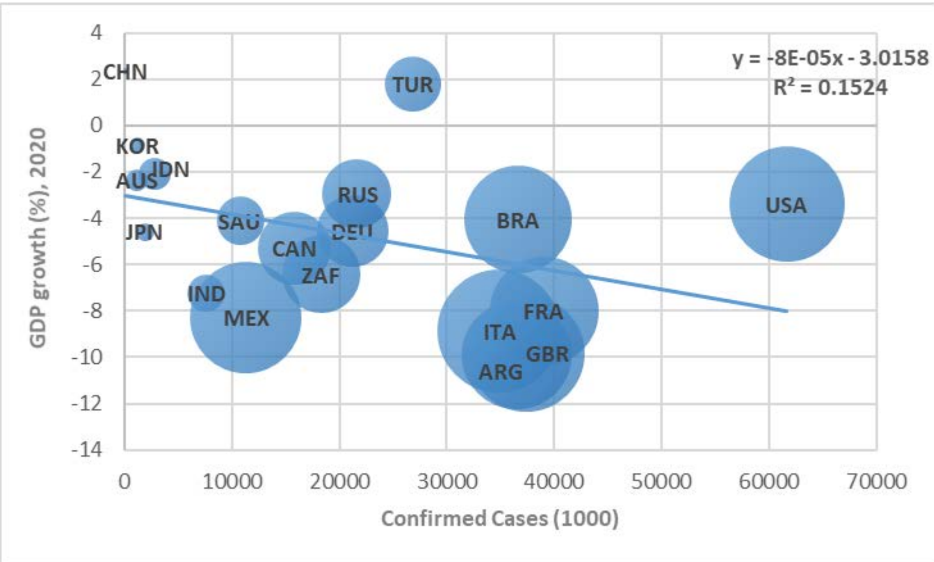
There are several ways to understand the difference in the behaviour of G20 members with respect to containment measures. When the consequences of the COVID-19 became more visible and the collective knowledge about the pandemic increased, countries integrated this new information in their policy responses. According to the Stringency Index, initial containment measures tended to be increased more gradually in the first countries that were hit by the pandemic (China, Japan, South Korea, Indonesia) and immediately more strict in the countries hit later (e.g. Argentina, Italy, Saudi Arabia, India) for similar numbers of COVID-19 deaths or cases (Figure 4). An alternative explanation would suggest that the strength of the containment measures does not fully depend on the impact of the pandemic, measured either in terms of confirmed cases or deaths. The severity of lockdown measures was rather determined by the preparedness of the health sector to face such a sudden and large shock. Countries with a health sector less prepared to such a large and sudden shock had to adopt stricter or more prolonged containment measures, in order to avoid the collapse of their healthcare infrastructures, in particular in emerging market economies. Additionally, at least in a developed country context, the actual stringency of the measures could also have depended on the structure of the economy, namely the share and role of proximity services, on top of the role of tourism. While this factor could help explain the heterogeneous impact of the pandemic across regions, an additional cultural/political component would need to be taken into account to explain the different degree of adaptation and attitude to respect social distancing and use face masks, the politicisation of the use of masks in some countries, as well as inequality and poverty considerations in countries with large strata of the population that did not have access to the health system. Since the initial response, countries have differed with their approach with most countries putting their focus on rapid vaccinations while some countries, most notably China, but also Australia and New Zealand, have taken much more hard-line approaches.

Figure 1: **GDP growth forecast for 2020, G20 members**



Source: IMF World Economic Outlook (October 2019, April 2020, October 2021) and authors' calculations.

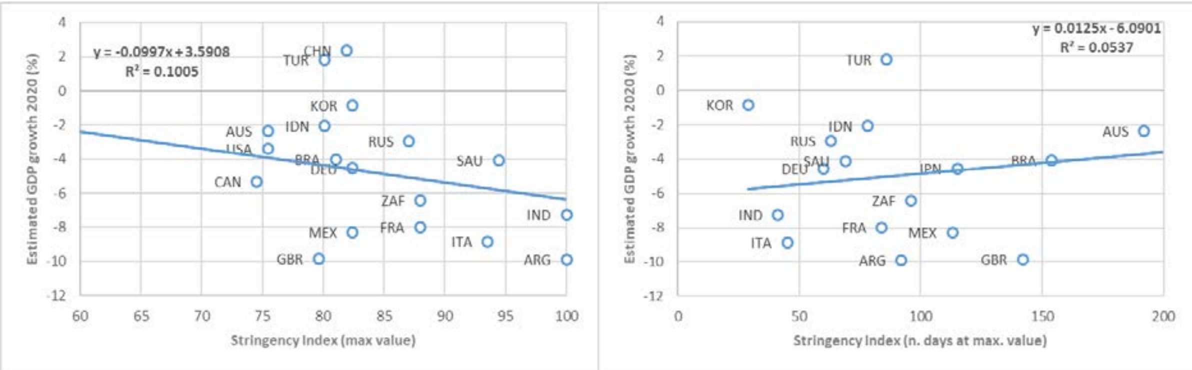
Figure 2: **GDP forecast in 2020 and strength of the COVID-19 pandemic**



Source: IMF World Economic Outlook (October 2021), Oxford stringency index and authors' calculations.

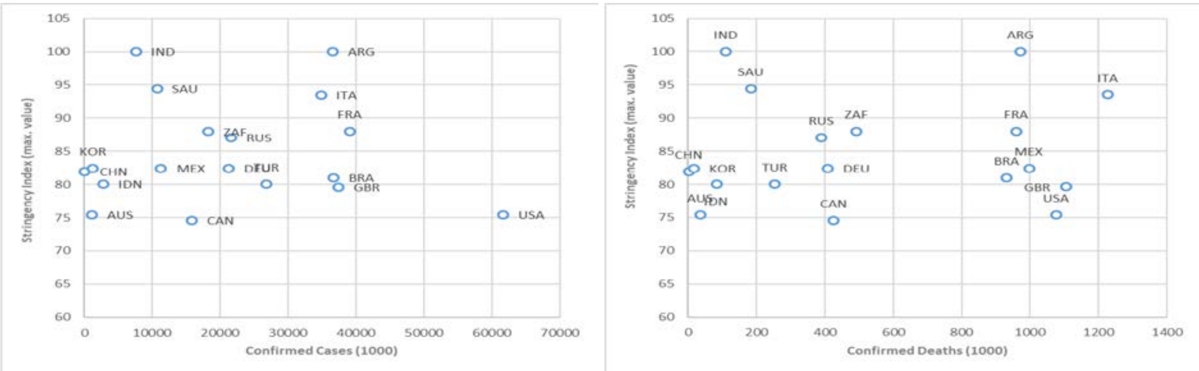
For any level of intensity of the containment measures adopted by G20 members, economic policies have cushioned the effects of the lockdown since their beginning, and for this reason it is important to properly assess them as we do in the following sections. The nature and evolution of the pandemic crisis has shown in fact that economic considerations may remain intrinsically intertwined to the health situation going forward. Until access to vaccination reaches critical thresholds at worldwide levels (WHO, 2021), the evolution of the COVID-19 pandemic may cause continual and uncertain risks to the overall global economic recovery. As shown in the US Fed "Grey book" of August 2020, the U.S. business activity and employment ticked up through late August, but economic growth was generally sluggish as COVID-19 hotspots hampered reopening efforts that fuelled an early-summer rebound (Fed, 2020).

Figure 3: **GDP forecast in 2020 and stringency index**



Source: IMF World Economic Outlook (October 2021), Oxford stringency index and authors' calculations.

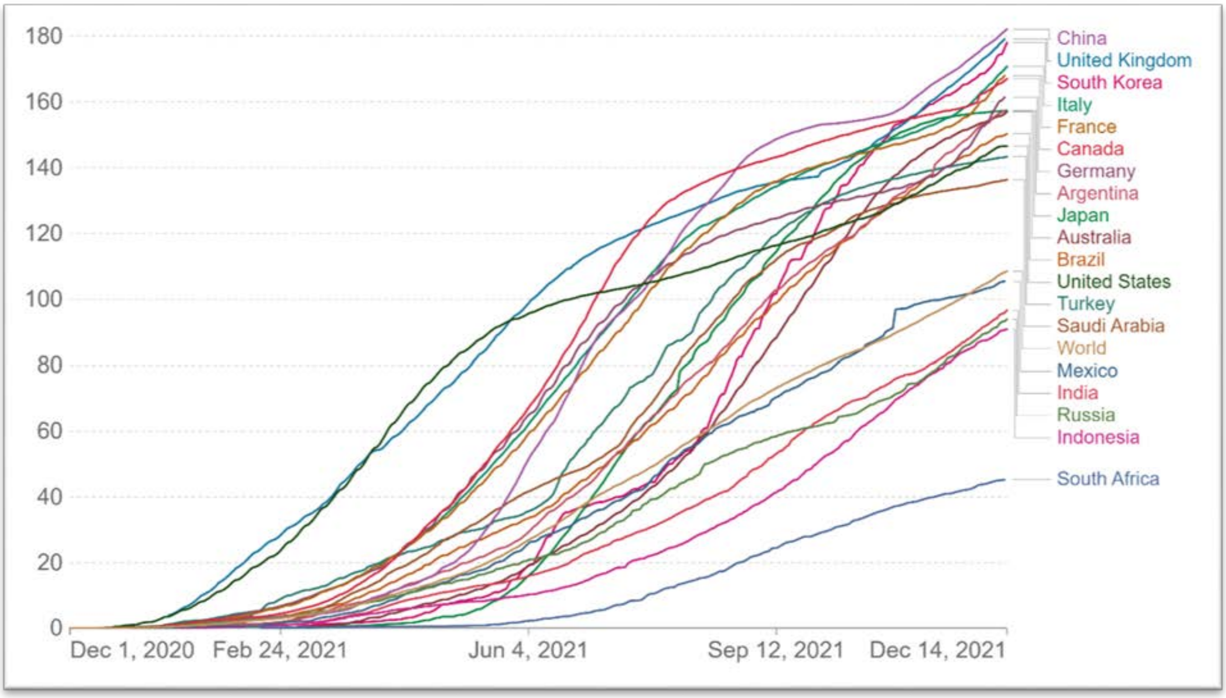
Figure 4: **Strength of the COVID-19 pandemic and stringency index (March-December 2020)**



Source: Oxford stringency index and authors' calculations.

Increased access to vaccines and effective public vaccinations campaigns – particularly in advanced economies – since end 2020 (Figure 5) appear to have increasingly been breaking the link between number of cases and the pressure on national health care systems, which reduces the need for severe containment measures, although the rise of new variants renders the situation unstable.

Figure 5: **COVID-19 vaccine doses administered per 100 people**



Source: Official data collected by Our World in Data, last update 14 December 2021.

Notes: All doses, including boosters, are counted individually. As the same person may receive more than one dose, the number of doses per 100 people can be higher than 100.

3. OVERVIEW OF THE INITIAL ECONOMIC RESPONSES

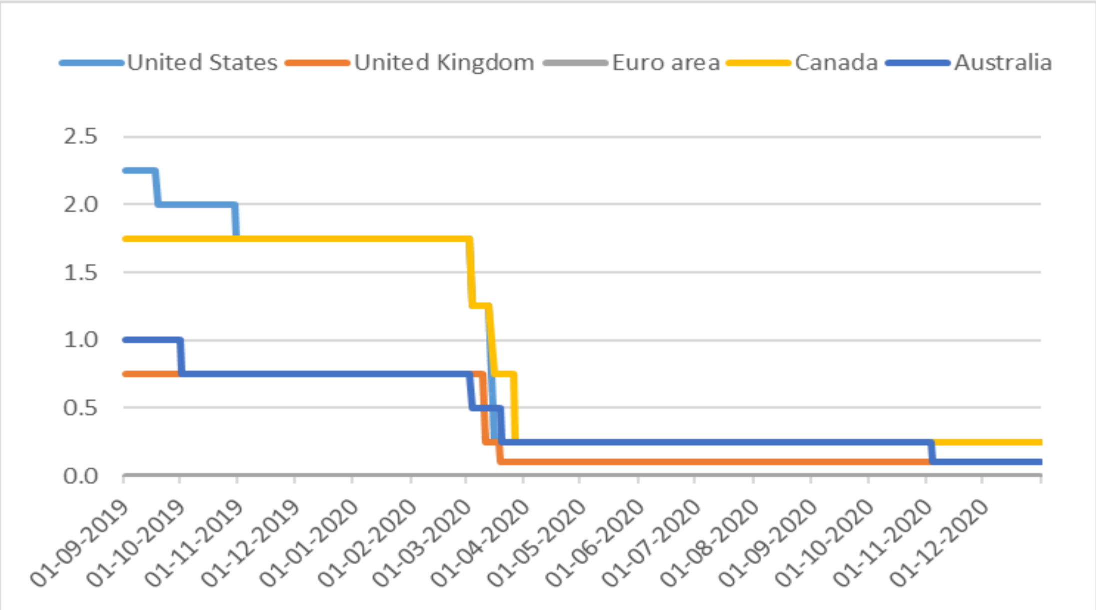
Besides containment measures, the policy response to the outbreak of the COVID-19 pandemic was more immediate for both fiscal and the monetary policy, compared to the 2008 financial crisis. In terms of monetary policy, central banks devised an innovative use of monetary stimulus in both size and scope. In advanced economies monetary policy went far beyond quantitative easing, while emerging market economies adopted quantitative easing measures for the first time. In addition, a much more significant size of fiscal response was provided by all governments, with a relative increase in the importance of fiscal measures in the overall policy mix compared to the global financial crisis reflecting not only lessons learned but also also reflecting the different natures of the crisis.

3.1 MONETARY POLICY MEASURES

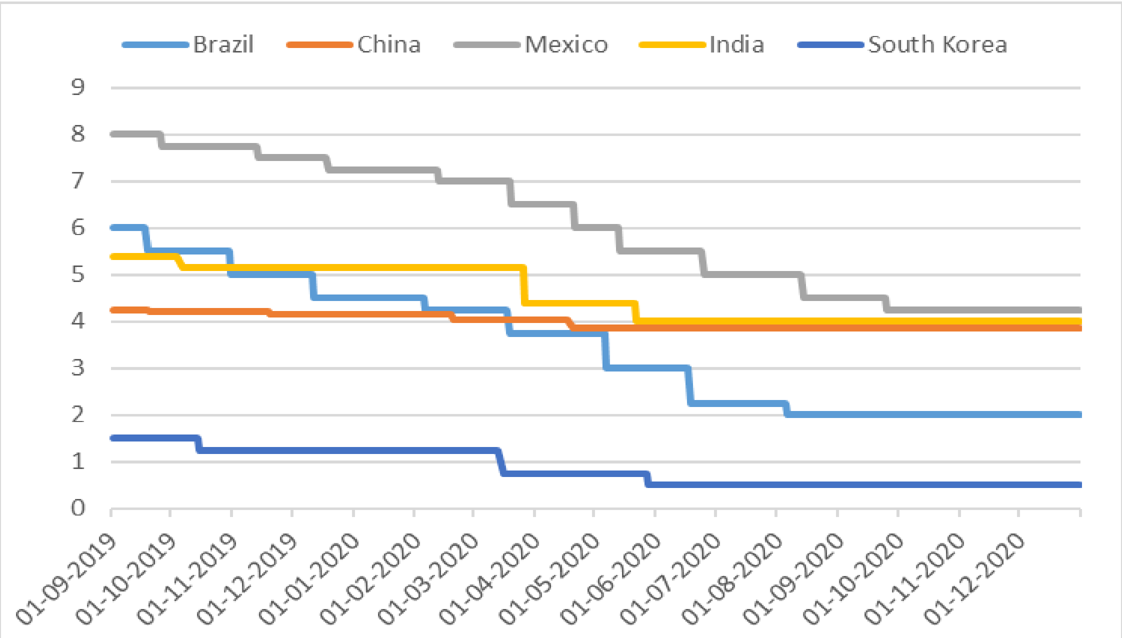
More in detail, monetary policymakers were the first to react once a pandemic became a distinct possibility. Central banks promptly cut their policy interest rates (Figure 6) or the rates on refinancing operations to pre-emptively ease financial conditions. As the situation deteriorated and financial market turmoil ensued, central banks introduced additional emergency measures to stabilise financial markets and restore confidence. They stepped up easing measures and introduced large-scale asset purchase programmes to ease financial conditions and supported an adequate supply of credit to households and firms. They also extended US dollar swap lines (and some repo lines) and injected liquidity via open market operations and standing facilities, as perturbations in domestic and dollar-funding markets became apparent. Because of these actions, central banks' balance sheets increased by more than USD 5 trillion dollars in the first half of 2020. Though the direction of the measures undertaken was the same, there have been some broad differences between the policy actions of AE and EME central banks, given the impressive extension of balance sheets of the central banks in the five largest advanced economies (i.e. US Federal Reserve, Bank of England, Bank of Canada, Bank of Japan, and European Central Bank).

Figure 6: **Policy rates, central banks advanced and emerging market economies**

(a) Advanced economies



(b) Emerging market economies



Source: Macrobond and authors' calculations.

In advanced economies, the speed and nature of the challenges forced central banks to expand their playbook beyond the quantitative easing already done in occasion of the 2008 global financial crisis. Given the shock's unprecedented scale and the concerns about an eventual relative ineffectiveness of traditional monetary policies in a low interest rate environment, central banks offered lifelines to businesses in distress, by either purchasing private sector debt outright (e.g. corporate bonds and commercial paper) or providing liquidity backstops to banks (e.g. in the form of funding-for-lending schemes), especially in the case of SMEs. In particular, when looking at the actions taken by the central banks of Japan, USA, Canada, UK, and the European Central Bank, the measures designed to provide credit to the non-financial private sector during the Covid-19 pandemic increased central banks' balance sheets by 6.3% of GDP on average in 2020, compared with around 2.5% during the 2008 crisis. A notable exception in this regard was the Fed, whose announced support to credit markets was large but still below that observed during the global financial crisis, when purchases of mortgage-backed securities had amounted to more than 8% of GDP. The amount of public sector assets purchased by end-2020 was also larger than the amount purchased during the entire course of the global financial crisis. Only the Bank of England announced a purchase programme amounting to about a quarter of total purchases during the 2008 downturn. Emergency liquidity lending to banks, which represents the traditional lender of last resort role of central banks, was instead smaller than in 2008, with the only exception of the Bank of Canada where most of the increase in activities (about 6.4% of GDP) was accounted for by the issuance of long-term repos. In all the five cases, the size of the US dollar swap lines was increased and their conditions made more favourable.

In the euro area, the European Central Bank (ECB) deployed a broad range of monetary policy measures to mitigate the adverse economic effects of the COVID-19 pandemic. These measures, which are complementary and reinforce each other, mainly consisted of additional asset purchases, ample liquidity provision to banks and an easing of collateral standards. In particular, the ECB launched the pandemic emergency purchase programme (PEPP) in March 2020 and gradually expanded it to EUR 1 850 billion while extending it until March 2022. The PEPP complemented the already pre-existing Asset Purchase Programme (APP), which was also temporarily stepped up in 2020. During the initial shock, the PEPP played a key role in the stabilisation of financial and bond markets. The ECB used it to ease the monetary policy stance and counter the impact of the pandemic on the inflation path. Purchases under the PEPP and the APP peaked in June 2020 at EUR 159 billion and have averaged EUR 99bn per month since March 2020. Between March 2020 and November 2021, net asset purchases conducted uner the APP and the PEPP have amounted to EUR 2.1 trillion. Furthermore, the ECB provided liquidity facilities aimed at ensuring funding to banks at favourable conditions in order to support lending to firms and households. In particular, the Targeted Long-Term Refinancing Operations (TLTRO III) have been one of the main components of the ECB's response to the crisis. These operations allow banks to borrow at an interest rate of -1% if they maintain their lending to firms and households. So far, banks have borrowed nearly EUR 2.3 trillion under these favourable conditions. The relaxation of collateral requirements in April 2020 enhanced banks' access to central bank funding. The ECB has also maintained the deposit facility rate at a record-low of -0.5% since September 2019.

Besides the scale of the actions, the impressive policy change was in the goal of the interventions made by some central banks. The case of the Fed decisions taken between the second half of March and early April 2020 was telling in this regard. Not only did it cut the federal-funds rate target to zero and purchased treasury bonds and mortgage-backed securities, as it had already done in 2008. It also set up two facilities to provide credit to companies, via the purchase of new bonds and loan issuance on the one hand and support for outstanding corporate debt on the other. By the beginning of April 2020, the facilities were extended and an additional programme to guarantee loans to small businesses was established, as well as a facility to support securities backed by student and consumer loans. From this point of view, the Fed's intervention no longer had the primary objective to stabilise financial markets (as in 2008), but to stabilise directly the real economy, with the ultimate goal of maintaining economic activity and employment by providing the finance required. This objective was generally felt more strongly in those G20 members whose social welfare systems generally occupy a smaller share of the government's budget, as in the case of the USA.

On the other hand, EME central banks had less room for manoeuvre, given the additional shock of severe large-scale capital outflows with the concurrent risk of currency crises. Still, many reduced interest rates. Between the end of February and the autumn of 2020, EMEs have lowered interest rates by an average of more than 150 basis points as well as reserve requirements, and, for the first time, implemented measures to support firms and mitigate stress in domestic currency bond markets, mirroring actions taken in advanced economies. This was testimony to the much improved monetary frameworks in place, complemented by the active use of foreign exchange reserve management.

In addition to direct monetary policy, the central banks of all G20 members also undertook a wide array of other measures to support the financial sector, including supervisory actions and regulatory support. Prudential measures supported monetary policy actions, with the goal to enable banks to meet increased funding demand. Countercyclical capital buffers, which banks had been required to accumulate in good times, were eased and a more flexible interpretation of the newly implemented expected loan provisioning standards was allowed or, in some cases, the corresponding transitional arrangements extended. Moreover, many central banks also introduced restrictions on the distribution, notably of dividends, to further bolster banks' lending capacity.

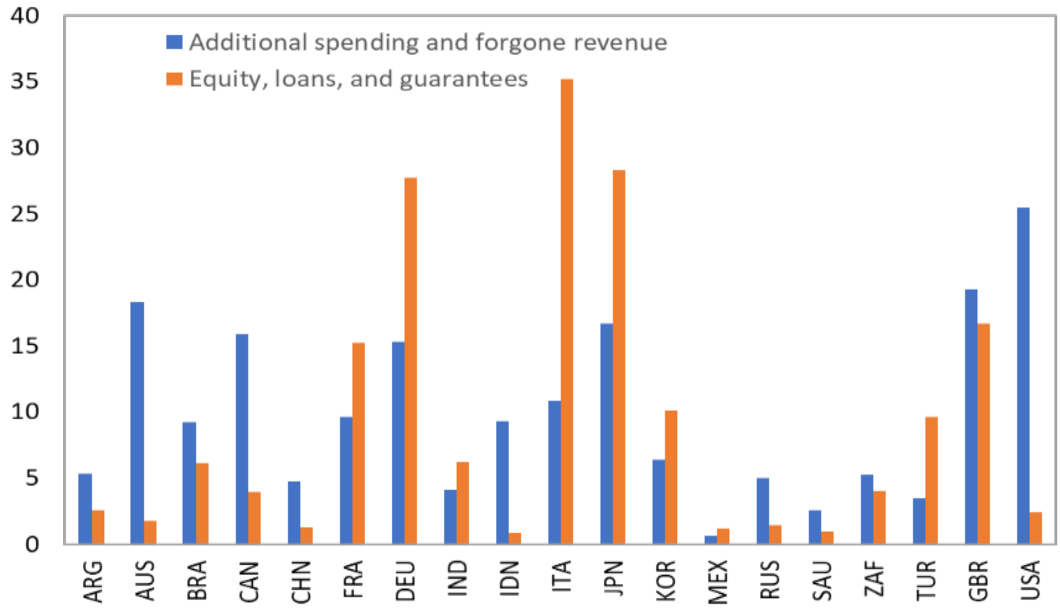
3.2. FISCAL POLICY MEASURES

As the coronavirus emergency intensified, governments around the world sprang into action and announced large-scale fiscal packages. The size and scope of the packages announced after the outbreak of the pandemic was unprecedented. In terms of the overall size of the fiscal stimulus (Figure 7), according to the October 2021 IMF World Economic Outlook, more than two-thirds of governments across the world have scaled up their fiscal support since April to mitigate the economic fallout from the pandemic. Announced fiscal measures have been estimated to be about USD 17 trillion globally, more than doubling the amount of USD 8 trillion in April 2020.

The G20 economies accounted for the bulk of the global fiscal support. Summing up the budget measures and the liquidity support measures standing at 9.5 and 9.4 percent of GDP respectively, the fiscal support provided to the economy by G20 members is more than 18% of their GDP, corresponding to about USD 16 trillion. This figure tripled with respect to the G20 Leaders statement of end-March, when the total support was about USD 5 trillion, and dwarfed the response to the global financial crisis during 2008–10 (equal to 3% of the G20 GDP at the time).

Across the various G20 members, the key difference was in the magnitude of fiscal support, with significant differences in the size (relative to GDP) of stimulus measures, especially between certain advanced economies, notably the US, Japan and Germany, and middle income countries such as Mexico and Russia. Overall, G20 EME fiscal support averages 5.0 percent of GDP, well below the average of 13.7 percent for AEs. The smaller size of the fiscal stimulus in EMEs needs not to be considered as a choice but rather contextualised against a framework of more restrained financial market access for this countries and higher financial market instability faced after the outbreak of the pandemic (see Section 4).

Figure 7: **Summary of Fiscal Measures in Response to the COVID-19 Pandemic (% of GDP)**



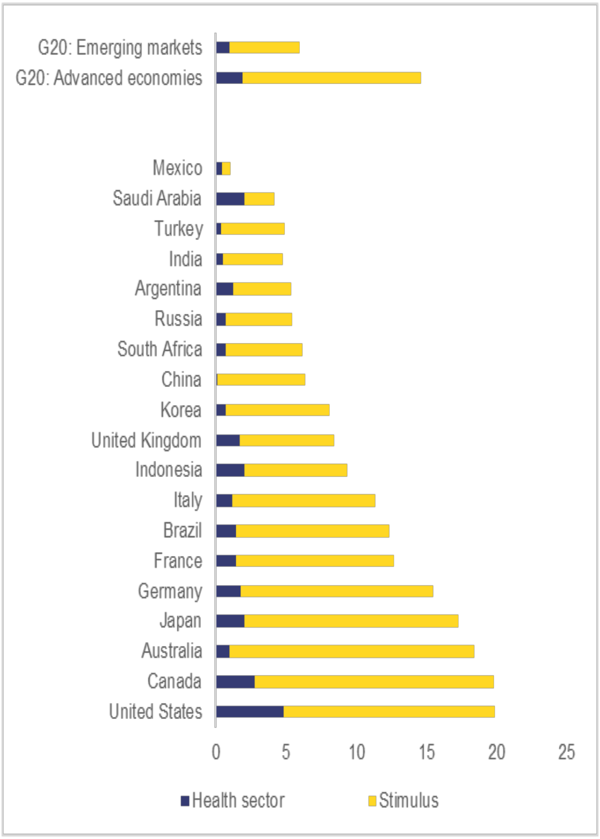
Source: IMF Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic (October 2021).

In terms of scope, the packages adopted by G20 members generally consisted of a mixture of outright transfers (e.g. through income support, expanded unemployment insurance schemes, wage subsidies and tax rebates/ waivers), bridge financing (e.g. tax deferrals and loans) and contingent resource transfers (e.g. equity injections and loan guarantees). The measures complement each other in protecting households and in helping companies survive cash flow problems. Two-third of these measures (USD 10.2 trillion) were additional spending and forgone revenue, directly affecting government budgets. The remaining other third (USD 6.4 trillion) was liquidity support, which could then add to government debt and deficits if these public interventions incur losses in the future. The total amount of liquidity support, if fully utilised, could represent a large percentage of GDP in countries such as Germany and Italy (Figure 8). In the EU, the Commission launched SURE, a EUR 100 billion instrument that is the emergency operationalisation of the EU Unemployment Reinsurance Scheme providing Member States with emergency temporary loans to support unemployment schemes put under stress by the pandemic.

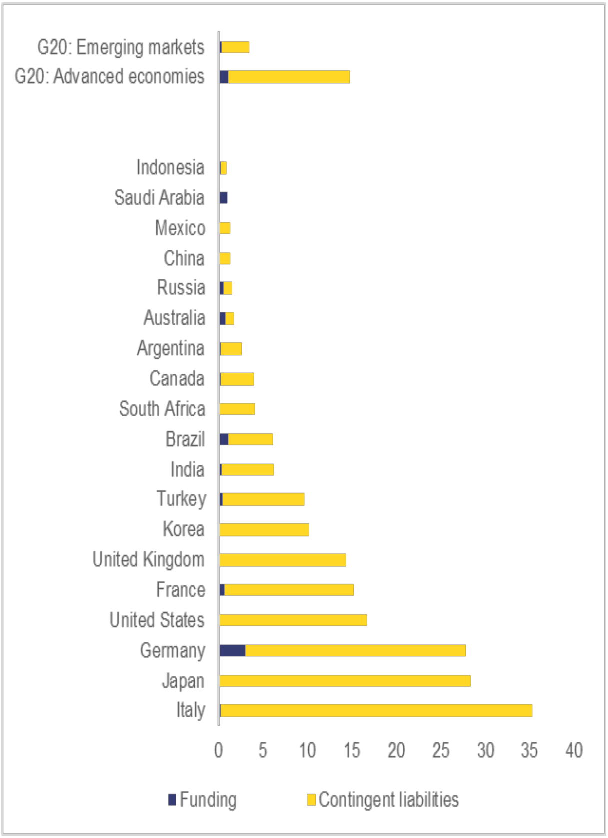
An even closer look at the information included in the policy trackers (see Annex II) reveals that the types of measures introduced specifically to support businesses were relatively similar across G20 members, with a particular preference for tax payment deferrals, and the introduction or expansion of short-time work schemes. More significant differences in the form of the measures could be seen in the measures to support households. Within advanced economies, European countries were able to expand on pre-existing measures due to their wider safety nets, while countries such as the USA and Australia provided direct cash transfers. The next section digs deeper into the factors that can explain these differences, providing an assessment of the initial policy response, with a focus on the fiscal policy reaction to the COVID-19 pandemic.

Figure 8: **Fiscal measures (% of GDP)**

(a) Budgetary measures



(b) Non budgetary measures



Source: IMF Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic (October 2021).

4. ASSESSMENT OF INITIAL RESPONSE, FOCUS ON FISCAL POLICY

As seen in the section above, G20 governments and central banks provided unprecedented monetary and fiscal support to their economies in response to the COVID-19 pandemic. The following section provides a preliminary assessment of this initial response, focusing on fiscal policy. As highlighted in the introduction, a focus on the role fiscal policy had in the pandemic response is justified above all by the size of the fiscal stimulus G20 members have undertaken, amounting to about USD 17 trillion including below and above-the-line measures. In this respect, G20 members already far outpaced their fiscal spending compared to the global financial crisis. In the case of the EU, the pandemic response has even led to creating an unprecedented joint fiscal instrument in the form of the EU Recovery and Resilience Facility (RFF) (Box 1).

In the context of the unique nature of the COVID19-caused crisis, two main roles for fiscal policy could be identified. The first role for fiscal policy was to ease income shortfalls and transfer real resources to firms and households, in addition to the resources needed to directly tackle the immediate health emergency. In view of the sudden, deep, but relatively short expected timeframe of the economic crisis for policymakers, particularly in its initial stages, the first objective was to avoid social unrest, ensuring that household and businesses would be able to quickly resume economic activity once the mitigation and lockdown measures - driven by the necessity to get the spread of the pandemic under control - ended and that viable firms would not turn into insolvent activites. In a second role, fiscal policy complemented the measures central banks took (see Section 3). Fiscal authorities supported central banks' actions through multiple channels (Alberola, Arslan, Cheng and Moessner, 2020). In general, by addressing credit risk concerns, fiscal support complemented monetary policies directed at sustaining credit to private sector. In most cases, governments extended guarantees to private non-financial sector loans. When combined with measures that extended collateral eligibility, these loan guarantees resulted in additional indirect backing of lending operations and helped central banks expand their supply of credit to borrowers. For instance, by extending its collateral framework to include government-guaranteed loans, the ECB allowed banks to pledge loans that would otherwise not have qualified as eligible for lending operations. In some cases, governments also offered fiscal backing to the newly established central bank programmes. For example, the US Treasury provided a backstop to various Federal Reserve programmes for an overall amount of about 2% of GDP. The UK Treasury also offered a guarantee of 100% of the stock of commercial paper purchased by the Bank of England through its Covid Corporate Financing Facility (CCFF).

The composition of fiscal programmes varied greatly across countries. For many countries, such as the US, Japan, and Australia, fiscal measures involved an outright transfer of resources to households and firms. For example, one evident difference in AEs was in the form taken by the support for workers, though all increased and extended the coverage and duration of unemployment benefits. Particularly in Europe with Germany, France, and Italy, short-time work schemes were expanded with government and often private sector support ensuring that workers were not let go during the COVID-19 lockdown but instead continued to receive their wages or a percentage of their wages (even through introducing a ban on dismissal like in Italy). In AEs with less social safety nets or different labour structures, most notably the US, governments instead directly provided transfers to unemployed workers. A second difference is that only some authorities took reinforced actions targeting those most affected by the shutdowns, while most had a blanket approach offering similar tax waivers or cash grants to all residents. In many EMEs, such as India and South Africa, where a large part of the population works in the informal sector and cannot be easily reached, governments expanded their social assistance programmes to shelter the most vulnerable. With respect to firms, governments used a variety of tools to provide bridge financing. Most G20 members deferred business income tax payments and some governments provided subsidies to particular industries, considered as vital to the economy.

Moving on to analyse what influenced the design of fiscal packages, one key factor was the size and shape of the welfare state (Figure 9). On average, AEs with higher welfare spending and thus stronger automatic stabilisers (e.g. France, Italy, Germany) relied less on discretionary transfers in the immediate emergency phase. Others (e.g. USA, Australia) had to adopt larger fiscal packages to substitute for the lack of automatic stabilisers capable of absorbing such a large shock. The temporary nature of some of these packages (e.g. USA) required a constant renewal of some of measures adopted to contrast the outbreak of the pandemic. First and ephemeral signs of recovery, as well as political debates driven by other considerations, should not create U-turns in the fiscal support to the economy and interrupt the recovery process in those G20 members relying more on discretionary and temporary transfers (see Section 5). Among EMEs, by contrast, countries with higher welfare spending also put in place larger packages involving immediate transfers (e.g. Korea).

The structure and stability of the business sector could also explain some of the features of the programmes. For example, countries in which firms faced larger liquidity shortages or had a larger stock of intra-firm credit put in place larger guarantee programmes and direct funding programmes. As it has been already shown in the occasion of the 2008 global financial crisis, inter-firm international trade finance tended to be highly vulnerable in times of economic crises (see e.g. Chauffour and Farole, 2009). Firms relying more on intra-firm credit suffered from a greater exposure to a default chain, while risk-adjustment processes restricted the supply of trade finance more than other forms of credit, despite the fact that trade finance should be a relatively low risk product line in normal times.

Box 1: **AN IN DEPTH LOOK AT THE EU RESPONSE**

A number of measures were quickly agreed at the EU level, in particular maximum flexibility in the use of EU funds and a package of EUR 540 billion of loans to support companies, workers and Member States. Furthermore, a new recovery instrument worth EUR 806.9 billion in current prices composed of both grants (EUR 421.1 billion) and loans (EUR 385.8 billion) and a revamped Multiannual Financial Framework of EUR 1074 trillion over 2021-2027 period have been agreed to mobilise resources for the recovery. This is of course on top of the considerable resources mobilised by the Member states themselves.

a. Immediate response

Mobilising the EU structural funds for most pressing needs was achieved through the Corona Response Investment Initiative that allows Member States to mobilise all the non-utilised structural funds, promoting an expenditure of up to EUR 37 billion of EU funds. Protecting jobs and people at work on the other hand has been addressed by the creation of the new instrument for temporary Support to mitigate Unemployment Risks in an Emergency (SURE), which provides up to EUR 100 billion in loans to Member States to address sudden increases in public expenditure for the preservation of employment.

In order to support companies, the European Commission has unlocked EUR 1 billion from the European Fund for Strategic Investments (EFSI) that will serve as a guarantee to the European Investment Fund (EIF). This will allow the EIF to issue special guarantees to incentivise banks and other lenders to provide liquidity to at least 100 000 European small and medium-sized business for an estimated available financing of EUR 8 billion. In addition, a new Pan-European Guarantee Fund, created by the EIB Group, aims at providing finance to hard-hit companies that are viable in the long-term (in particular small and medium-sized companies). The fund is based on guarantees from the Member States and is expected to mobilise up to EUR 200 billion of additional financing. Finally there has been the easing of financing of healthcare spending in euro area Member States through the Pandemic Crisis Support, established by the European Stability Mechanism, will provide loans of up to EUR 240 billion.

b. Investment and financial support in the first years of recovery

In order to achieve a sustainable and fair recovery the Commission presented a recovery plan, which targets the sectors and geographical parts of Europe most affected by the current crisis, which was then agreed to by the European Council on 21 July 2020. The funding will be composed of two parts: i) a revamped Multiannual Financial Framework of EUR 1074 trillion for 2021-2027; and (ii) an emergency recovery instrument, called Next Generation EU, funded through the Commission’s borrowing on the capital markets. Under the agreement, the new Recovery and Resilience Facility is worth EUR 806.9 billion (about 5½% of the annual EU GDP): with EUR 421.1 billion to be distributed as grants and EUR 385,8 billion made available in the form of loans. The funding will be channelled through the European budget and will reinforce financial programmes key to the recovery, with an end date of 31 December 2024 and will be based on a formula that includes a mix of criteria including unemployment as well as expected loss of GDP. For example Italy – initially one of the hardest hit by the virus outbreak – emerges as the biggest beneficiary and is set to tap into EUR 127 billion in loans and more than EUR 82 billion in grants. This landmark package will support Member States’ efforts to recover from the crisis, boost private investment and help ailing companies, and accelerate the green and digital transitions and will be spent across two pillars.

The first and primary pillar will support investment and reforms that are essential for a sustainable recovery. This pillar will include a new Recovery and Resilience Facility with a budget of EUR 560 billion (distributed in grants and loans) and specifically designed to fund investments and reforms aligned with European priorities. The second pillar will group new and topped-up instruments now deemed indispensable given the lessons learned from the health crisis. Among them is a new health programme, EU4Health, with an overall budget of EUR 1.7 billion, aiming at investing in prevention, crisis preparedness, procurement of medicines and equipment, as well as improving long-term health outcomes.

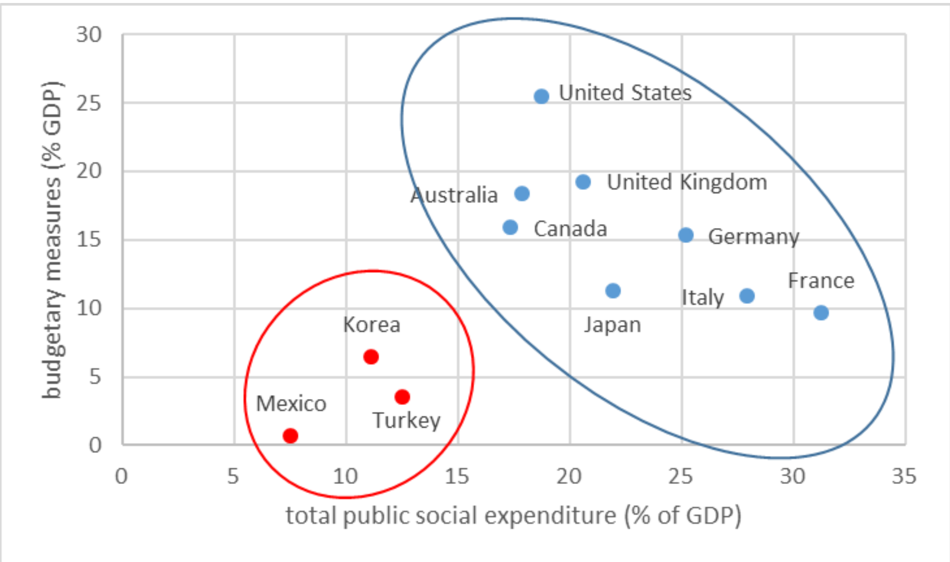
With respect to the international experiences of G20 members assessed in this paper, the EU response to the COVID-19 pandemic shock has three main strengths:

(i) It highlights a clear recovery strategy, consistent with the economic environment and evolution of the health situation, defining ex-ante the priorities for the reforms to be undertaken;

(ii) It balances short-term and long-term objectives, and the renewed focus that one should put support investment and reforms that are essential for a sustainable recovery;

(iii) It creates new tools to support the internal demand in the EU and, by extension in the global economy, which will not expire in the very short term. Given that the COVID-19 shock has increased even more the degree of uncertainty with negative consequences for consumption and investment decision, it is even more relevant that public policy can provide a stable framework for supporting a sustainable recovery.

Figure 9: **Social expenditure and budgetary measures (% GDP)**



Source: IMF, Fiscal Monitor, October 2020; OECD, Society at a Glance 2019; Authors' calculations.

The size of fiscal packages equally depended heavily on the fiscal space available. As shown in the BIS annual economic report, budgetary expansions were smaller in countries where sovereign credit default swap (CDS) premia rose most, and especially where they had previously been high. This is especially true for Argentina, Turkey, Mexico and Brazil among the G20 EMEs. Similarly, countries with higher pre-crisis credit ratings, such as Germany, Japan, and the USA, put in place more expansive budgetary measures. Overall, all EMEs faced tighter limitations on their budgetary stimulus packages because of external constraints, as well as their weaker health infrastructure and inherently greater vulnerability. Accordingly, markets generally showed a lower tolerance for their sovereign debt levels. As a result, the budgetary response of EMEs was much weaker, at 5.0% of GDP, compared with 13.7% for AEs (Figure 7 and 8).

AEs governments could so far count on a higher degree of confidence by financial markets, instilled also thanks to the action of central banks. Policies like the yield curve control (YCC) allowed some central banks to gauge the variations of governments bonds' interest rate over the longer term by targeting their price (rather than their quantity as in the case of quantitative easing actions). In other words, in a yield curve control framework, some central banks targeted longer-term rate and pledge to buy enough long-term bonds to keep the rate from rising above its target. The Bank of Japan (BOJ), in particular, used YCC as part of its large policy efforts aimed at lifting inflation, and this led to smaller government bonds purchases than the large quantitative easing programs, while keeping yields on long-term bonds at historically low levels. The US Fed has recently started mentioning YCC as a possible tool, in addition to forward guidance and QE, while the Central Bank of Australia imitated the BOJ by setting a target of around 0.25% for the three-year bond yield.

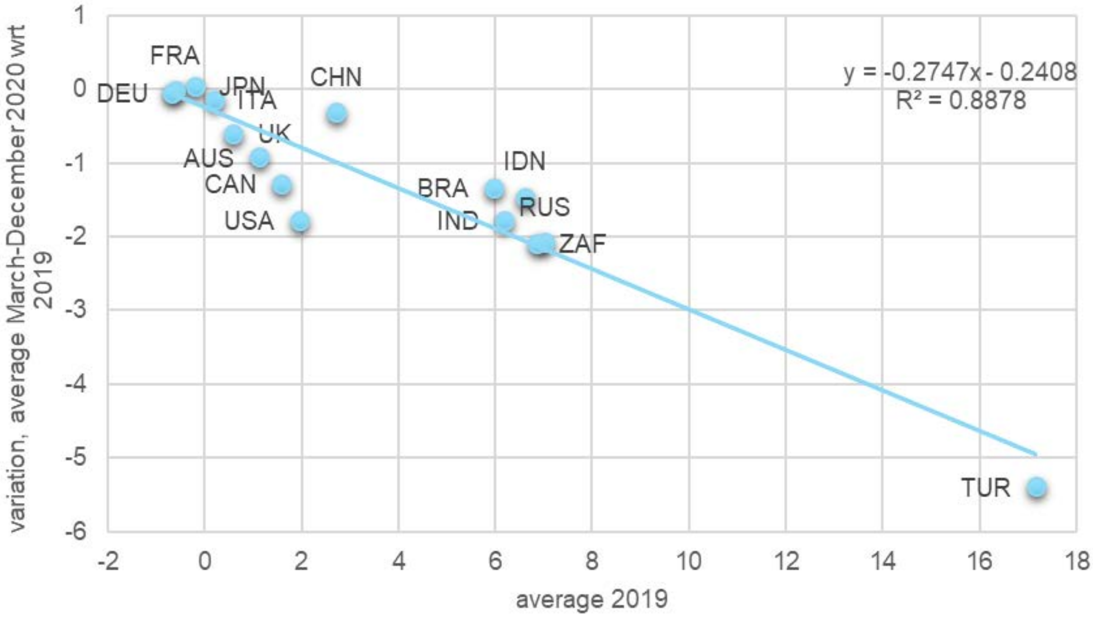
Evidence suggests the government bond yield curve steepened more in the G20 EMEs than AEs, requiring governments in the former to pay higher interest rates for emitting debt with longer-term maturity. Looking at the variations in the yield of 2 year and 10 year government bonds' yield (Figure 10), larger negative variations could be observed for the yield of 2 year government bonds (panel a) rather than for the 10 year bonds (panel b) and in particular for EMEs. Allowing for deviations from the Ricardian equivalence, the steeping of yield curves in EMEs could lead the governments of these countries to issue more short-term debt titles and so became more vulnerable in case of a widespread and growing fear about a government's inability to service its debts, where investors might demand sharply higher interest rates or even to refuse to buy short-term debt in a self-fulfilling panic akin to a bank-run. In this context, it would be important to have a debt management strategy to avoid an excessive shortening of public debt titles' maturity, which could lead a government to focus its attention on very short-term decisions and to leave aside longer term considerations that could instead be necessary for ensuring that the recovery from the COVID-19 shock will lead to sustainable growth (Section 5).

Because of the unprecedented scale of fiscal support, the amount of government debt have seen very significant increases. In terms of stock, according to early IMF forecasts, under the baseline scenario, global public debt reached an all-time high, reaching almost 100 percent of GDP in 2020-21 — a cumulated surge of 15 percentage points from 2019 (Figure 11). Meanwhile, the average overall fiscal deficit soared, being more than 10 percentage points higher in 2020 than in 2019. All AEs, except Italy and some large EMEs, including China and Russia, are projected to have 2021 primary deficits still of at least 2 percentage points of GDP above the 2016–19 average. Thus, public debt will increase substantially in many AEs, and is likely to grow further for all economies into the recovery.

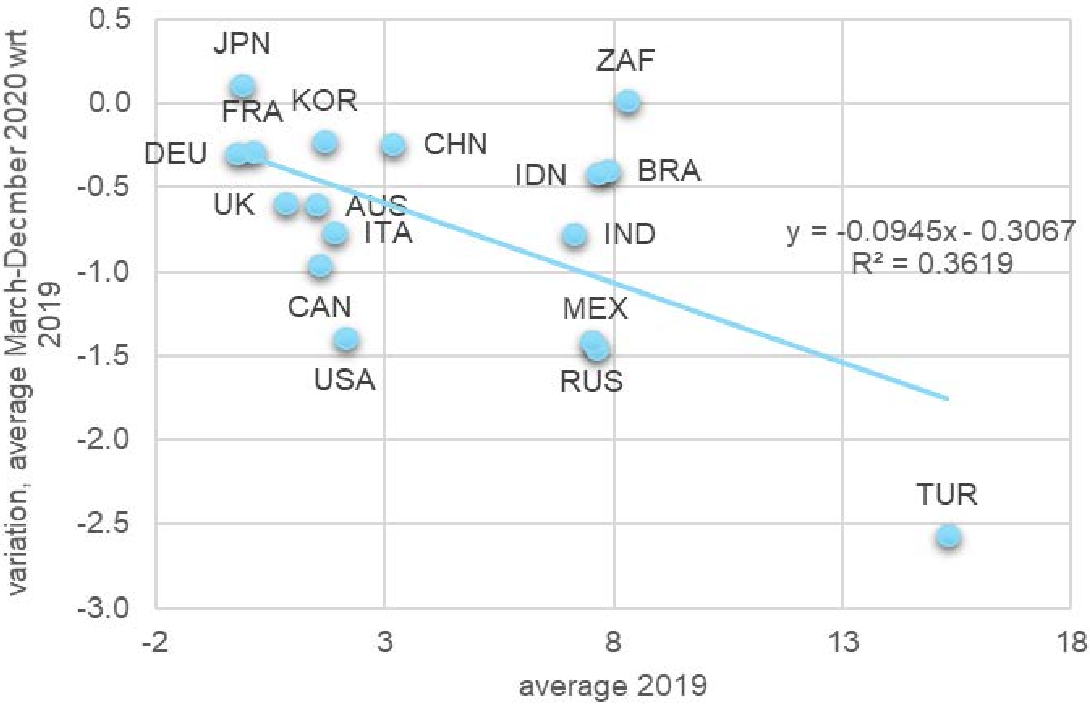
The issue of intergenerational fairness arises here, linked to the build-up of large debt stocks. For young people, and especially for vulnerable youth, the COVID-19 crisis already created considerable risks in the fields of employment and disposable income. Looking at the long term, however, the rising levels of public debt could be particularly worrying as its long-lasting effects on society and the economy bring questions of intergenerational justice to the forefront. In the context of ageing societies, increasing public debt levels due to the COVID-19 crisis may further exacerbate existing challenges to sustainable public finances. The distributional impact of decisions and choices made today and whether the costs associated with mitigation and recovery measures will be allocated fairly across society and generations needs to be considered. It is therefore essential that the greater government spending is targeted to focus on growth and help create economic opportunities for young people in the context of rising inequalities.

Figure10: **Changes in the yield of 2 year and 10 year government bonds' yield**

(a) 2 years



(b) 10 years



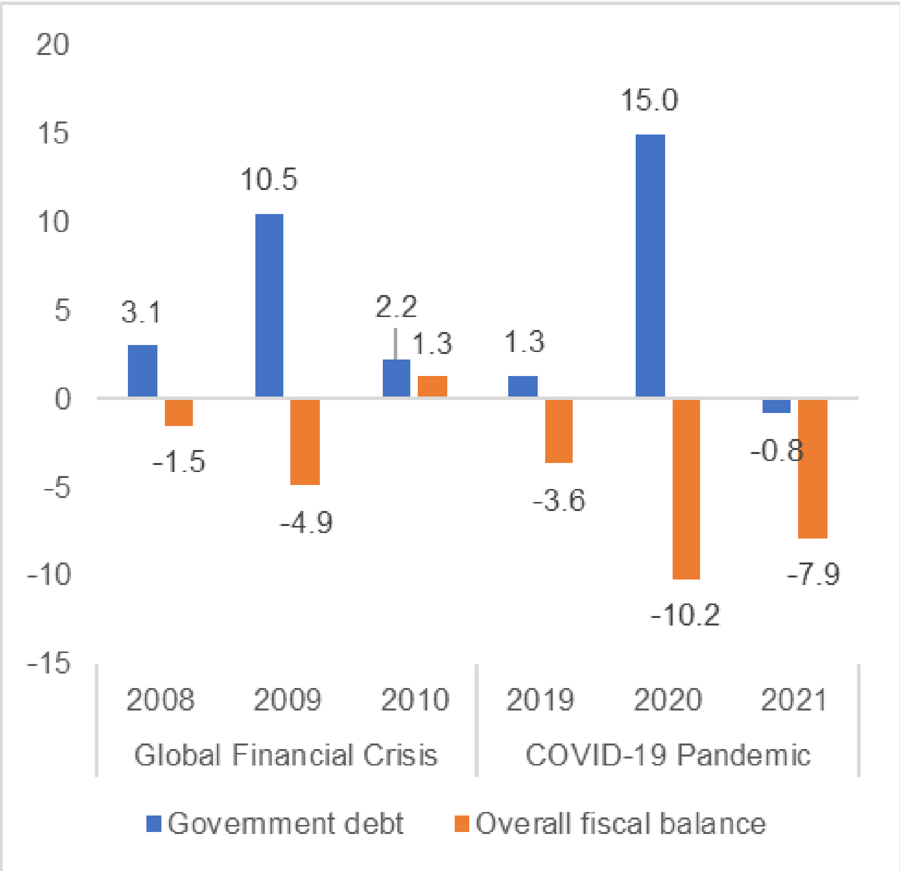
Source: Macrobond and authors' calculations.

The paper thus far has not touched on the recent of rising inflationary pressures that have appeared particularly evident since autumn 2021 reaching 4.9% in the euro area, 6.8% in the US and 5.5% in the UK, driven by rising consumer demand and ongoing supply chain bottlenecks. This has led to a debate among economists over the transitory nature of the current inflation rise, though it appears that in the medium term rates should return to historical averages (Turkey, where the inflation rate has topped 21% is an outlier due to its unorthodox monetary policy). Nonetheless recent rises have led to increased pressure on the central banks to address this issue by scaling back monetary stimulus and moving to earlier-than-expected interest rate hikes. In the euro area, the ECB considers that inflationary pressures are temporary and that monetary accommodation is still necessary for stabilising inflation at 2% in the medium term. Furthermore, in the strategy review it adopted in July 2021, the ECB committed to forceful or persistent monetary plicy measures when the economy is close to the lower bound and acknowledged that it would tolerate a transitory period in which inflation may be moderately above target.

5. KEY TAKE-AWAYS

The COVID-19 pandemic has caused a crisis of unprecedented nature. The crisis did not have economic but health roots. As in the case of the global financial crisis of 2008–09, the subsequent shock propagated into all sectors of the economy becoming a shock of global nature, touching upon all countries and all activities. The different nature of the two crises and the different policy responses limits direct comparison though.

Figure 11: **Change in Global Government Debt and Overall Fiscal Balance (% of GDP)**



Source: IMF Fiscal Monitor (October 2021).

In Section 2 of this paper, we have shown that the negative impact of the COVID-19 pandemic on the GDP growth in 2020 was positively correlated with the strength and depth of the pandemic itself, while it did not seem to be significantly correlated with the strength and length of containment measures specifically. The explanations put forward for this finding are of different nature, such as the global demand negative spill-overs in export-driven economies, or the role of consumer behaviour that led consumption to plummet even in the absence of lockdowns. Other factors that could also explain this finding are the gradual formation of a collective knowledge about the pandemic, the different levels of health care system preparedness to a systemic shock, behavioural adaptation of economic agents to restrictive measures, value systems, trust in government, government effectiveness, and finally the macroeconomic policies that were put in place to sustain the economy since the very beginning of the pandemic.

As pointed out in Section 3, the response to the pandemic crisis was quicker and stronger than in 2008. This was true for both monetary and fiscal policies. In particular, faced with an unprecedented global sudden stop, central banks were again at the forefront of the policy response. They moved swiftly and forcefully to prevent a potential financial collapse from exacerbating the damage to the economy. They stabilised the financial system, cushioned the adjustment for firms and households, and restored confidence to the extent possible. As for fiscal policy, when compared to 2008, the support of fiscal policy was immediately there and did not wait for too long before being enacted. All G20 members significantly expanded their budgets, adopting unprecedented measures to protect the health, job, and income of their citizens, as well as the activity of their firms. Their speed of reaction to the pandemic shock was high in all cases. A significant example in this regard is the EU. A number of measures were quickly agreed at the EU level, in particular providing maximum flexibility in the use of EU funds and a package of EUR 540 billion of loans to support companies, workers, and Member States, constituting a joint borrowing on a large multinational scale. Furthermore, a new recovery instrument, Next Generation EU, worth EUR 806.9 billion composed of both grants (EUR 421.1 billion) and loans (EUR 385.8 billion) and a revamped Multiannual Financial Framework of EUR 1.074 trillion over 2021-2027 period were agreed, in order to mobilise resources for the recovery. This is of course on top of the considerable resources mobilised by the Member States themselves, thanks to the set-up of a State aid Temporary Framework and the activation of the general escape clause under the Stability and Growth Pact, which has provided EU Member States with the necessary fiscal space to respond to the Covid-19 pandemic.

Section 4 showed that fiscal measures provided support to monetary policies, beyond having been used to ease income shortfalls and transfer real resources to firms and households, and in addition to the resources needed to tackle the health emergency in the first place. All G20 members adopted considerable non-budgetary measures (besides increasing budgetary expenditures) consisting of guarantees, loans, or equity acquisitions in some companies. The size of these non-budgetary measures outpaced the one of budgetary measures in most of G20 members and, in some cases, it even surpassed 30% of the GDP. Moreover, section 4 looked at the specific composition of the fiscal programmes, revealing that this has varied greatly across G20 countries: the design of fiscal packages depended heavily on the size and shape of the welfare state, the fiscal space available, and the inherently greater vulnerability of emerging market economies.

Throughout its various sections, the paper showed that, in terms of both the monetary and the fiscal policy, AEs and EMEs adopted different actions depending on the policy space at their disposal. Even if EME central banks had less room for manoeuvre, due to the severe capital outflows they had to face, they were still able to decrease their policy rates and reserve requirements. Some of them adopted, for the first time in their history, measures to support firms and mitigate stress in domestic currency bond markets mirroring what done in AEs since 2008. In AEs, some central banks extended their toolkit beyond quantitative easing measures, by purchasing debt outrights or providing backstops to banks. As for the fiscal policy, all EMEs faced tighter constraints on their budgetary stimulus packages because of external constraints, weaker health infrastructure, and lower tolerance of financial markets for their sovereign debt levels.

Country differences aside, a legacy of the measures and the recession will be much higher public sector indebtedness. According to IMF forecasts, under the baseline scenario, global public debt is expected to reach an all-time high, almost reaching 100 percent of GDP in 2020–21 (+15 percentage points from 2019). This will exacerbate long-term trends that the lobal financial crisis had already previously intensified and can raise issues in terms of intergenerational fairness.

Looking ahead, as the economy transits from the illiquidity phase, possibly through the insolvency phase, and finally to the recovery phase, a series of considerations may be taken away by policy makers on the basis of the analysis developed above.

I. The COVID-19 crisis highlighted the benefits for economic activity and financial stability of timely, bold and well-coordinated policy actions. Supportive coordinated fiscal policies played an important role in stabilising the economy, working in tandem with monetary policy (European Commission, 2022). It remains hence imperative to ensure a careful management of policy support, avoiding a too early or too late withdrawal. While this points to the value of having adequate policy space to meet future economic crises, the lessons of the 2010 Toronto G20 Summit should be internalised. In that occasion, the improved economic outlook at the end of 2010 led G20 leaders to make plans to withdraw the fiscal stimulus provided since 2008, and to commit to at least halving the deficit by 2013 and stabilising debt-to-GDP ratios. That decision was revealed to be at odds with the new slowdown in the economy observed during the first quarter of 2011 especially in some advanced countries, which raised concerns about the recovery's sustainability up to having the prospect of a second “dip” into recession. Continuing to support the economic recovery could be relevant in countries using short-term temporary measures, requiring a continuous replacement of expired measures up to the recovery (Section 4). At the same time, the overarching challenge for central banks will be to help once again to re-establish the basis for sustainable growth in a context of price stability (Section 3). This will be particularly challenging given the pervasive uncertainty surrounding the path of economic adjustment to the post-COVID world. With the containment measures lifted in some locations, economic activity gradually resumed, but up to when the waves of the pandemic are not ended for good, lingering uncertainty may well hold back expenditures and companies may continue to operate at less than full capacity under social distancing rules. Some households and firms may face once more liquidity problems and even solvency ones, which could absorb some fiscal space and put into danger the banks’ ability to use, without exhausting, their capital buffers for supporting the recovery.

II. Lifting and sustaining higher economic growth is paramount, as is the sustainability of the increased amount of public debt. Even as low interest rates relative to growth would imply favourable debt dynamics, this cannot be taken for granted going forward, not least given that market perception of debt sustainability can change abruptly. Governments should take supportive fiscal measures that are well targeted, and stand ready to take corrective actions to ensure a fiscal path consistent with a view of fiscal sustainability. Particularly for high-indebted countries, measures taken today should avoid pre-empting the future fiscal trajectory, which would need to ensure sustainable public finances over the long-run. Policy actions should also not be short-sighted by focusing only on the short term, but used as an occasion for shaping the medium-to-long-term future of the economy. As indicated in the G20 Action Plan, measures undertaken for the recovery of the economy should aim at fostering strong, sustainable, balanced, and inclusive growth. This would put the onus on a growth-friendly composition of fiscal policies and debt management, to avoid excessive shortening of public debt titles’ maturity (Section 4). The same attention should be payed to structural reforms for ensuring the inclusivity and sustainability of the recovery, starting with measures to implement well-performing social protection systems and fair tax regimes, and/or to support the green and digital transformation of the economy. As already underlined by the former President of the European Central Bank Mario Draghi in 2014, “without determined structural reforms, aggregate demand measures will quickly run out of steam and may ultimately become less effective. The way back to higher employment, in other words, is a policy mix that combines monetary, fiscal and structural measures".

III. The focus of policy action needs to shift in favour of preparedness against old and new types of risks, with the aim of increasing the resilience of societies and economies. For example, the nature of the pandemic crisis showed that health and economic considerations need to remain intrinsically intertwined going forward. Until ambitious vaccination targets are not reached at global level, the evolution of the COVID-19 pandemic may cause continual and uncertain risks to the economic recovery (Section 3). The US recovery that began at the end of spring 2020 could be attributed to unprecedented monetary and fiscal measures and a prompt lift of the lockdown restrictions. Yet, the positive signs of recovery have quickly slowed down over the same summer due to a significant increase in cases in several key US states. The EU and the other G20 members witnessed similar dynamics in the second half of 2020, with the increase in the number of cases leading to new lockdown measures and deceleration of economic activity. Stimulus measures have been successful in limiting the damage thus far, but it remains necessary to enhance the resilience of G20 economies and safeguard them against downside risks caused by economic (e.g. high public debt) and other (e.g. climate, digital, further health) factors.

IV. The benefits stemming from multilateralism and international coordination should be preserved.

First, international coordination should continue and intensify, transforming into international action, on those matters that cannot be solved at national level. Clear examples of such necessary action are the following four.

(i) As this paper shows that GDP estimates are correlated with the number of COVID cases and deaths, health safety and pandemic preparedness at global level are necessary to have sustainable growth (Section 2). G20 action remains hence essential to provide financial help to those countries that do not have the means to fight the virus - particularly in the areas of diagnostics, therapeutics, and vaccines - and therefore raise pandemic preparedness worldwide.

(ii) Further G20 efforts are necessary for ensuring that the recovery efforts are fairly shared. Clear examples are provided by the work of the OECD/G20 Inclusive Framework on the domestic tax base erosion and profit shifting (BEPS). It would be essential for G20 members to follow up on their commitment to implement the OECD proposed framework, endorsed by the G20 leaders in October 2021; the development of a global tax system remains key to build a framework where gaps and mismatches between different countries' tax systems could no longer be exploited.

(iii) International solidarity needs to be tapped when the national public debt becomes no longer manageable. Given the high levels of public debt, there is the risk that the current pandemic crisis transforms into a debt crisis especially for low income countries. For this reason, the G20 Finance Ministers endorsed in April 2020 the Debt Service Suspension Initiative and then the Common Framework for Debt Treatment in response to a call by the World Bank and the IMF, to grant debt-service suspension to the poorest countries and help them manage the severe impact of the COVID-19 pandemic. Further G20 guidance remains highly warranted for the follow-up of these measures, notably in a post crisis high debt and low growth scenario where some degree of burden sharing would be helpful for all debtor and creditor countries, while beggar-thy-neighbour behaviours should be strongly avoided.

(iv) Global cooperation has played a key role in the emergency phase of the pandemic to avoid unnecessary barriers to trade and investment and disruption to global supply chains. Stepping up that cooperation will be crucial for the economic recovery.

Second, the coordination at international level of national actions is increasingly needed in some areas. Economies are highly interrelated, and hence coordinated or synchronised support is better perceived by markets than individual country reactions. For example, coordination is needed both to produce the high amounts of tests and vaccines needed to maintain a low infection rate and to allocate the tests and vaccines to those who need them most, be they countries or people within countries. Also, international coordination may become more relevant over time as the presence of spillovers increases when countries exit from the lockdown and gradually reopen their borders. Supply-side spillovers could be stemming from reshoring decisions on the back of the rising protectionism and de-globalisation trends accentuated by the COVID crisis. At the same time, demand-side negative spillovers could derive from countries' premature withdrawal of their fiscal spending. If global demand is conceived as a public good requiring efforts and providing benefits to all countries, international coordination of fiscal policies may be necessary to avoid a secular stagnation scenario by maintaining debt sustainability and strengthening growth. Clearly planned and communicated recovery strategies would therefore remain essential, given internal consumption and investment may take time to recover in an uncertain environment, leaving the burden of the recovery on the shoulders of public policy alone in case of glooming external demand.

Third, through international fora like the G20, countries can exchange information about the characteristics of the pandemic, about the efficiency of tests, drugs, and vaccines, sharing medical resources as the heterogeneity and the moving nature of the pandemic allow. Furthermore, by sharing their knowledge and experiences, international fora may even allow their members to update their policy toolboxes. It is telling in this regard how central banks in emerging market economies have mimicked quantitative easing policies taken by advanced countries in the past, while these latter explored new policy tools learning from their policy experiences.

V. The EU could take actions at the international level to reinforce the benefits of its status as a member of the G20. On the basis of the Next Generation EU package, the EU internal response (including the new Recovery and Resilience Facility) would need to be clearly communicated as this could have benefits beyond the EU's borders and reinforce the strength of the EU in answering to the pandemic (Section 4). The EU has put upfront in its recovery package the necessity to balance short-term and long-term objectives - combining short-term emergency and macro and social stabilisation - to build back better, to enhance resilience anchoring expectations, and to support credibility and facilitates crowding in of private investment. How the EU will approach fiscal policy related questions could constitute an example for others. This could create a win-win framework, and steer cooperation across G20 members with benefits for all, given that the economic recovery will not be certain as long as the COVID-19 pandemic continues to evolve at international level.

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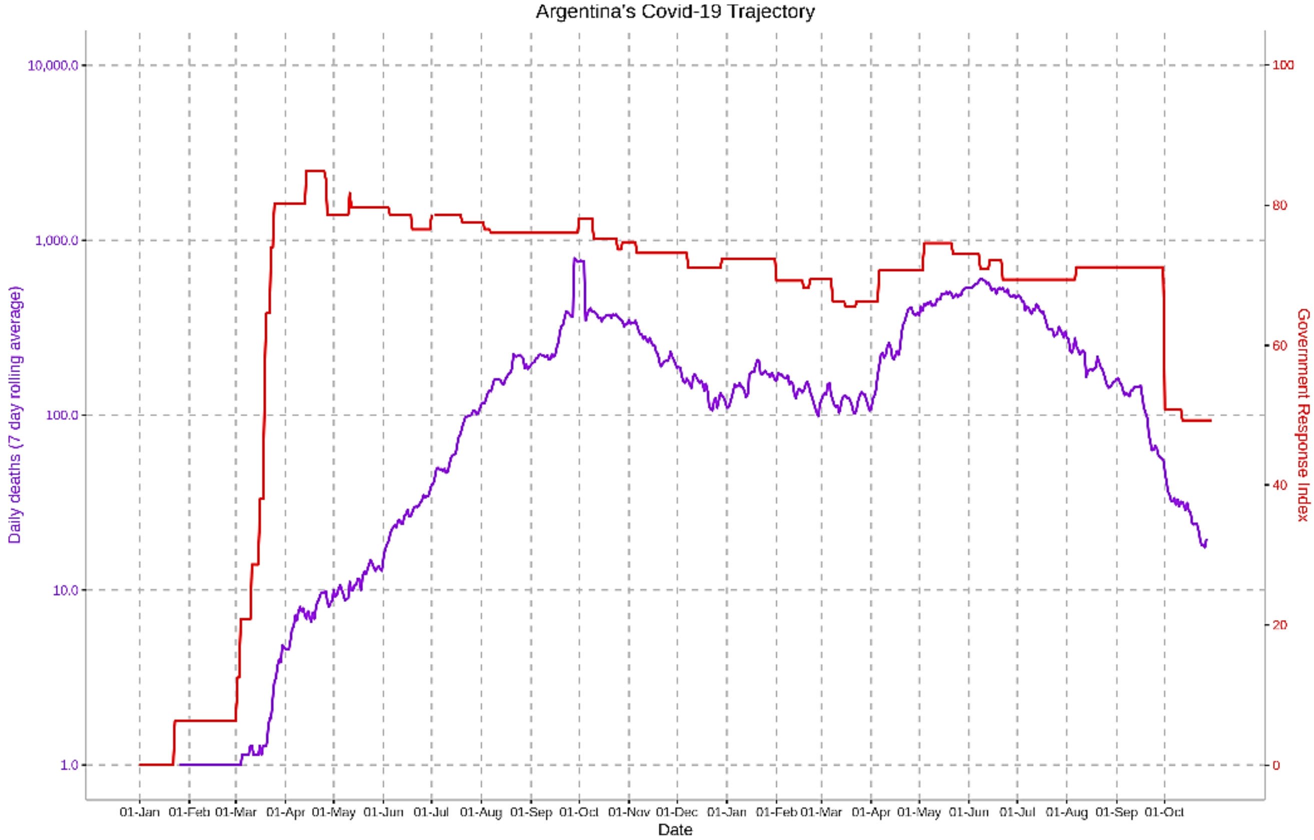
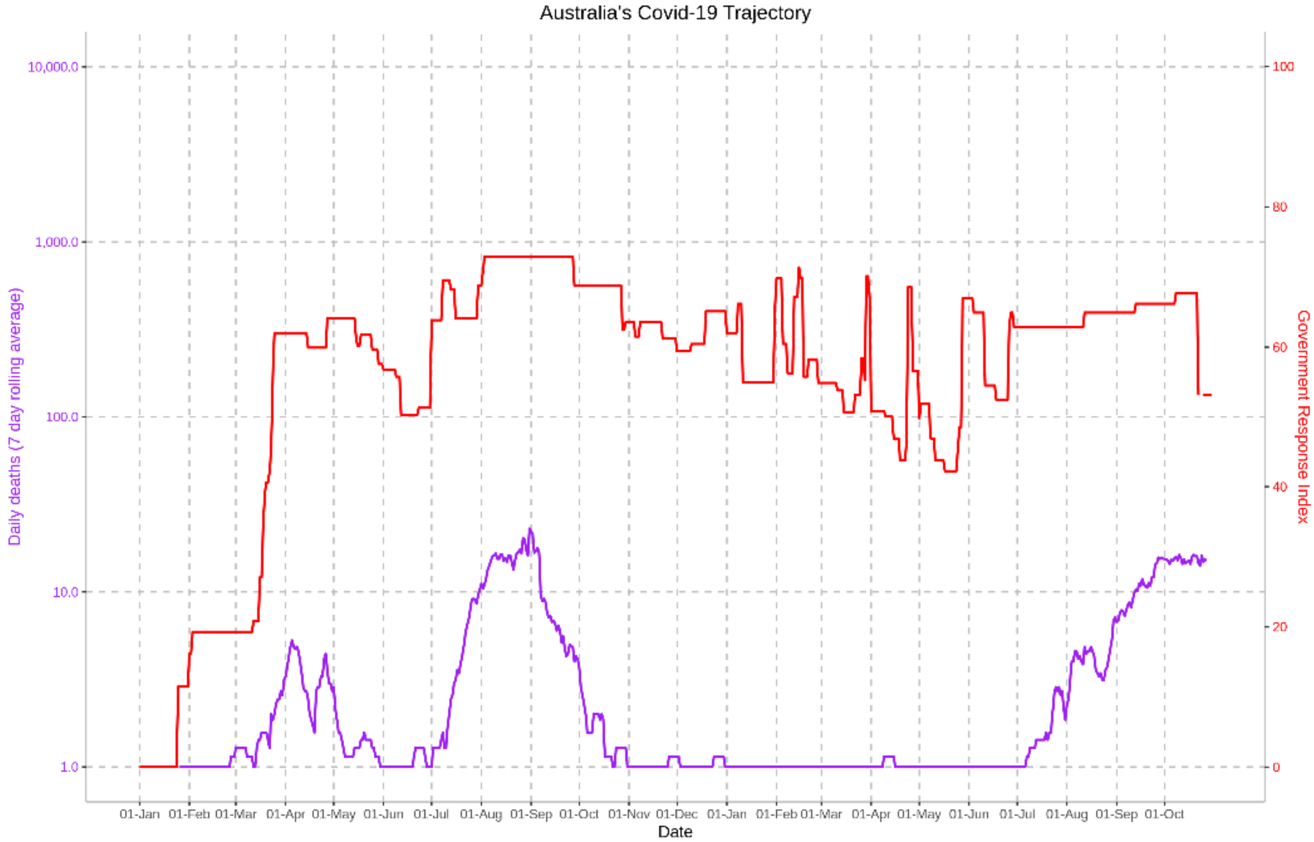
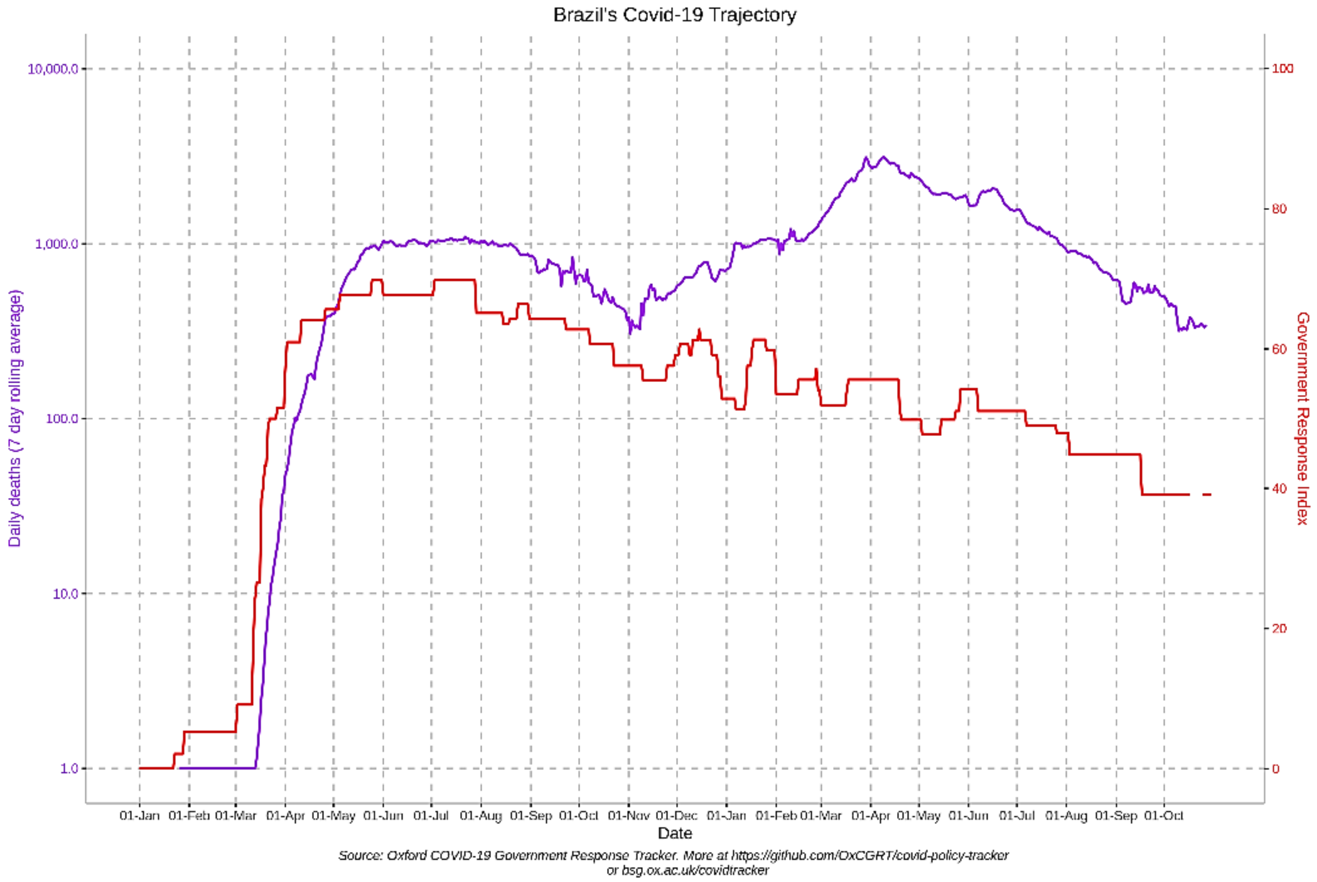
ANNEX I - REPORTED DEATHS AND STRINGENCY INDEX IN G20 MEMBERS – UPDATED UP TO 31 OCTOBER 2021

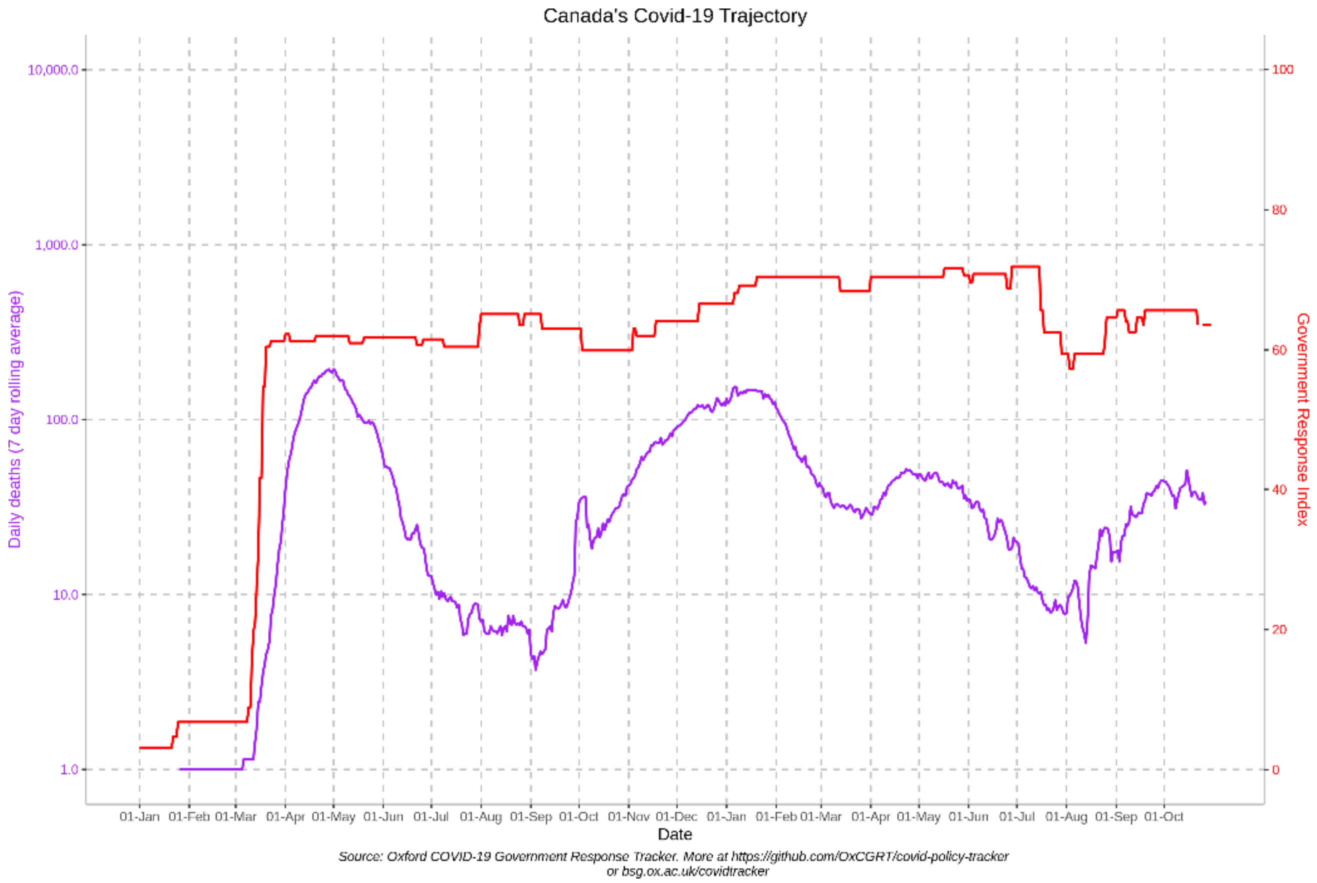


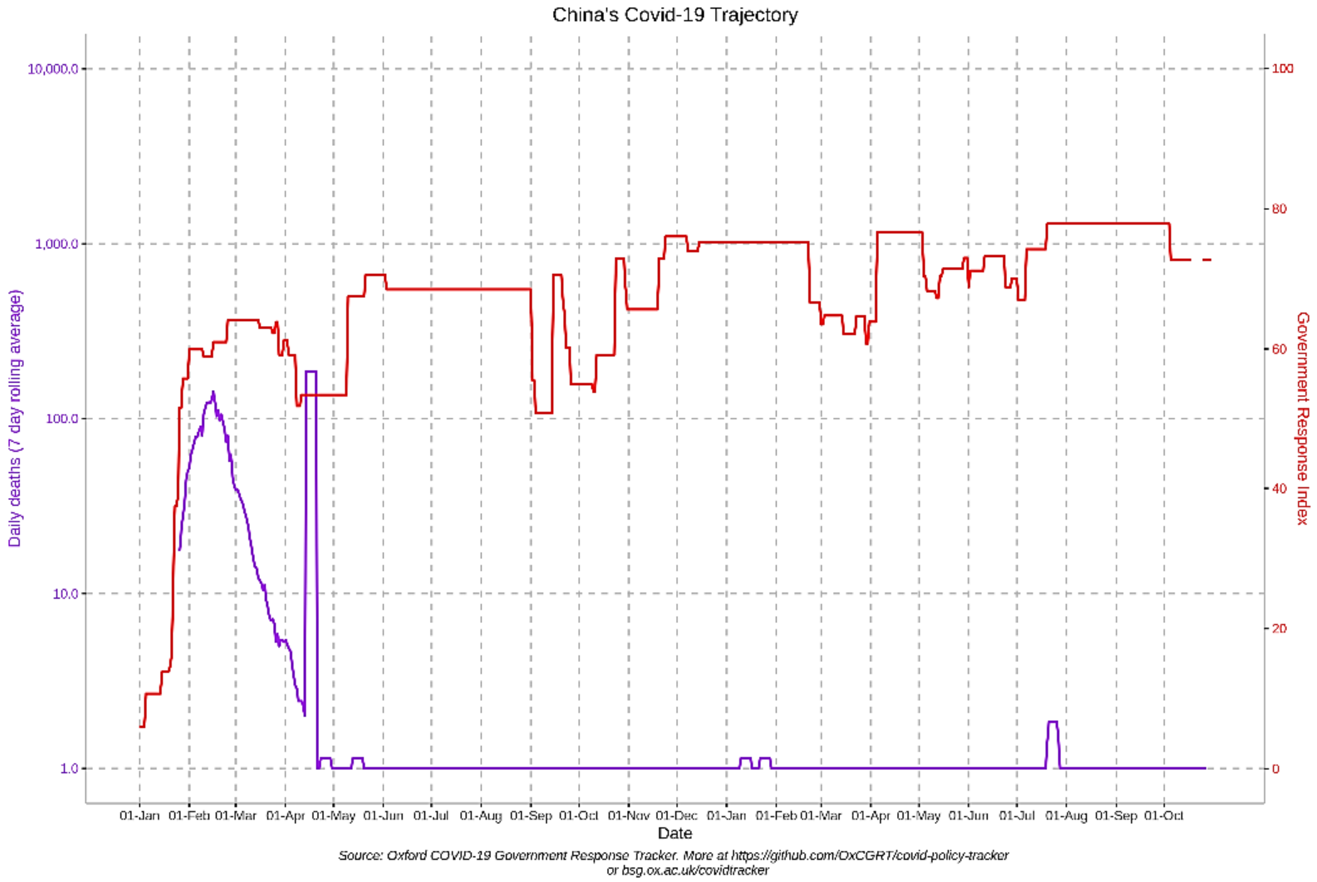
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker or bsg.ox.ac.uk/covidtracker

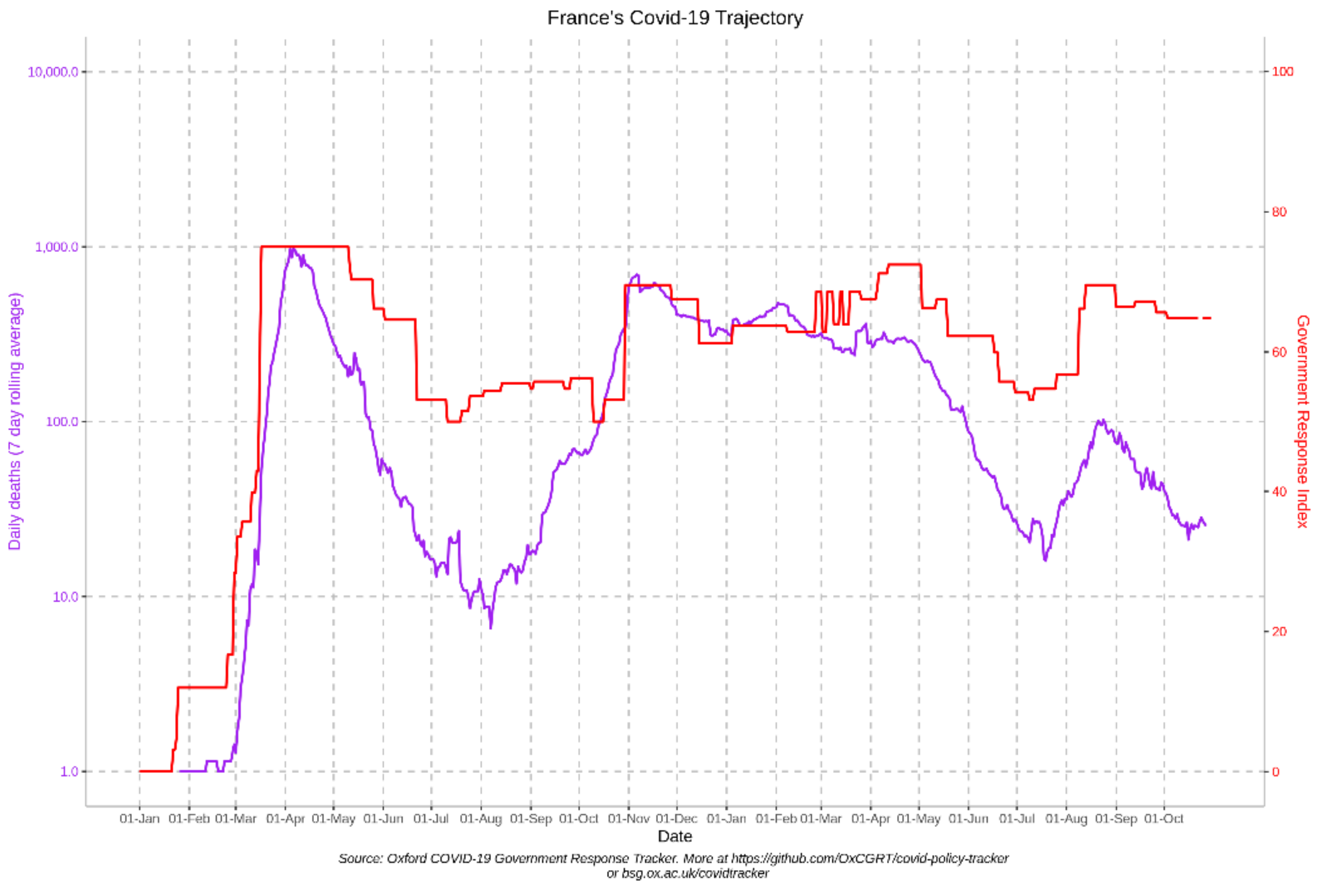


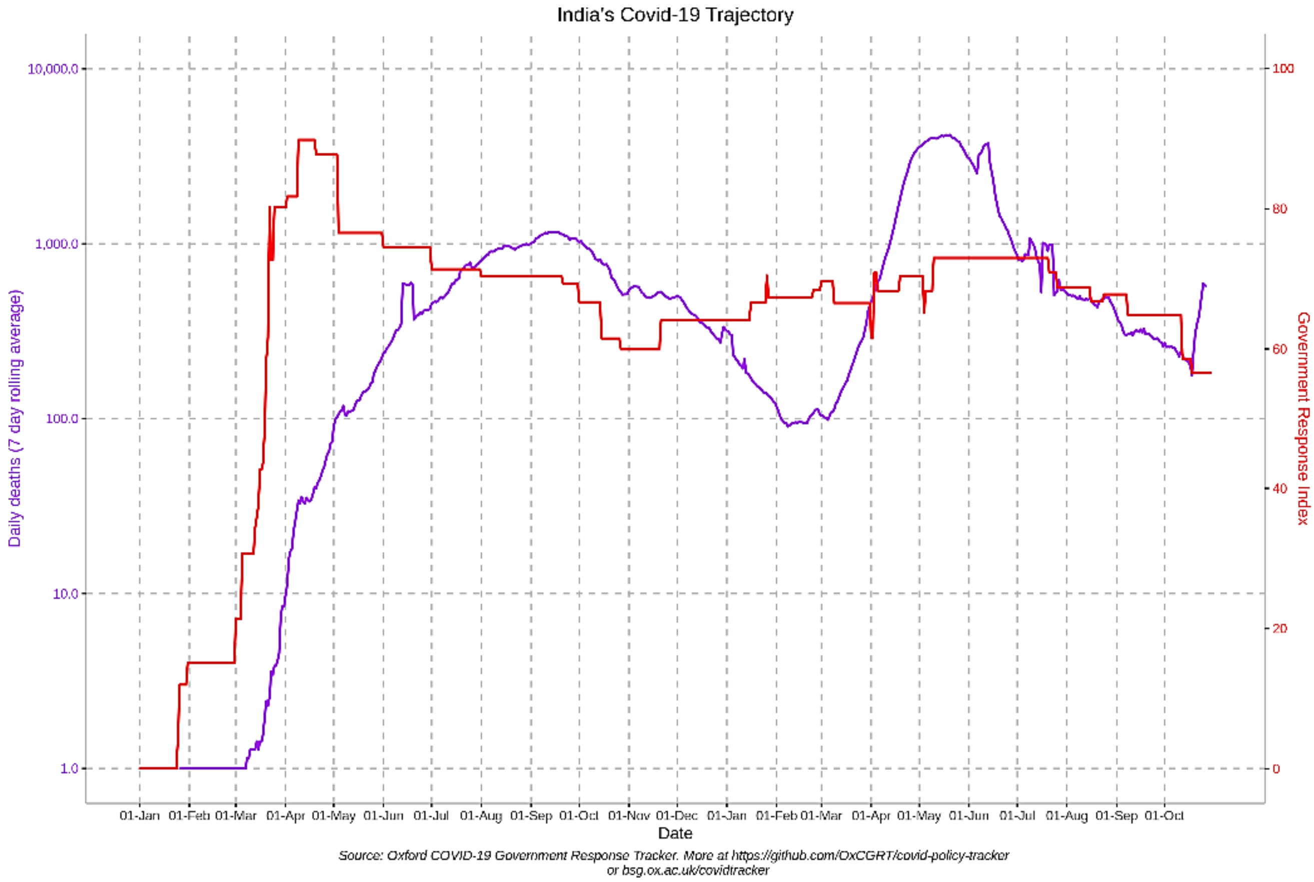
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker or bsg.ox.ac.uk/covidtracker

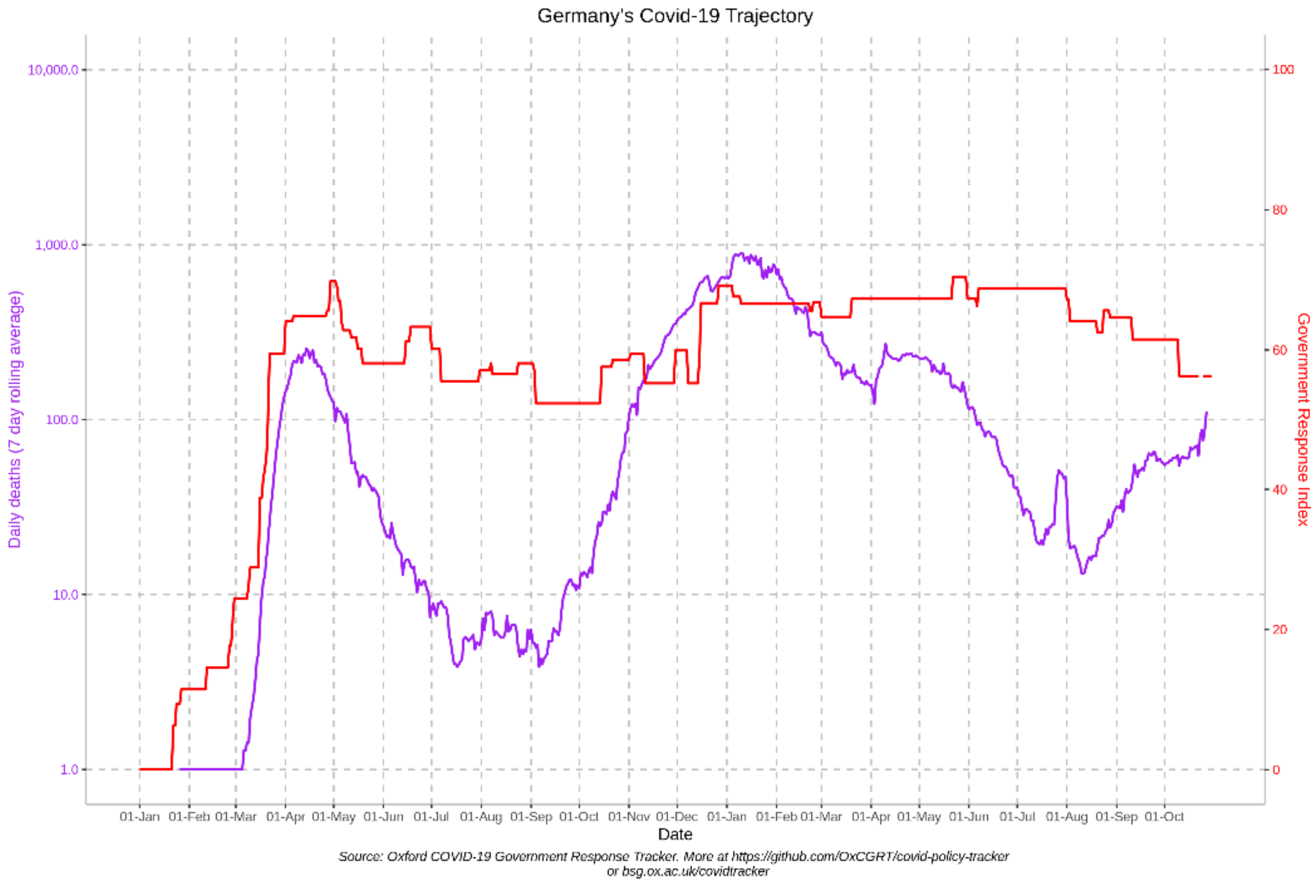

Brazil's Covid-19 Trajectory
10,000.0
1,000.0
100.0
10.0
1.0
Daily deaths (7 day rolling average)
100
80
60
40
20
0
Government Response Index
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker or bsg.ox.ac.uk/covidtracker


Canada's Covid-19 Trajectory
10,000.0
1,000.0
100.0
10.0
1.0
Daily deaths (7 day rolling average)
100
80
60
40
20
0
Government Response Index
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker or bsg.ox.ac.uk/covidtracker

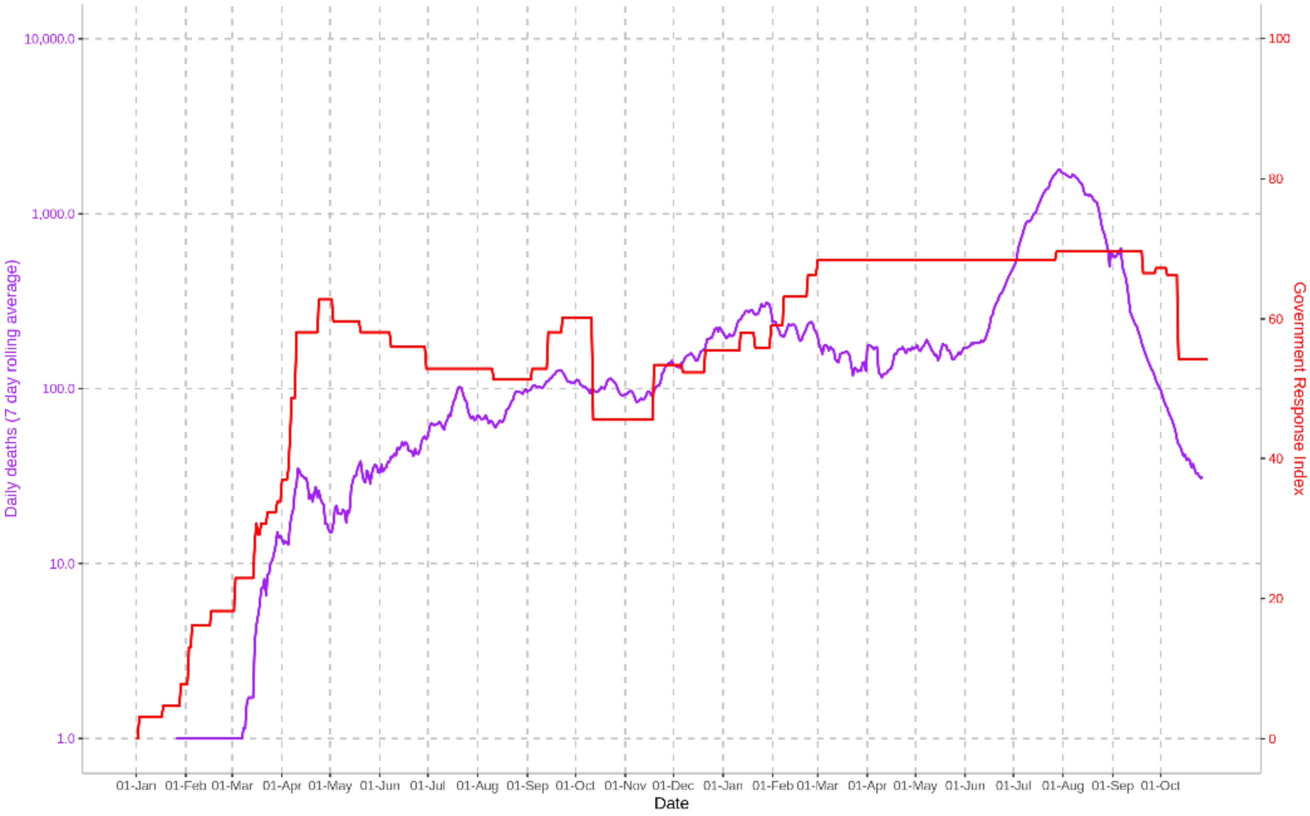

China's Covid-19 Trajectory
Daily deaths (7 day rolling average)
Government Response Index
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker


France's Covid-19 Trajectory
Daily deaths (7 day rolling average)
Government Response Index
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker


India's Covid-19 Trajectory
Daily deaths (7 day rolling average)
10,000.0
1,000.0
100.0
10.0
1.0
Government Response Index
100
80
60
40
20
0
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker

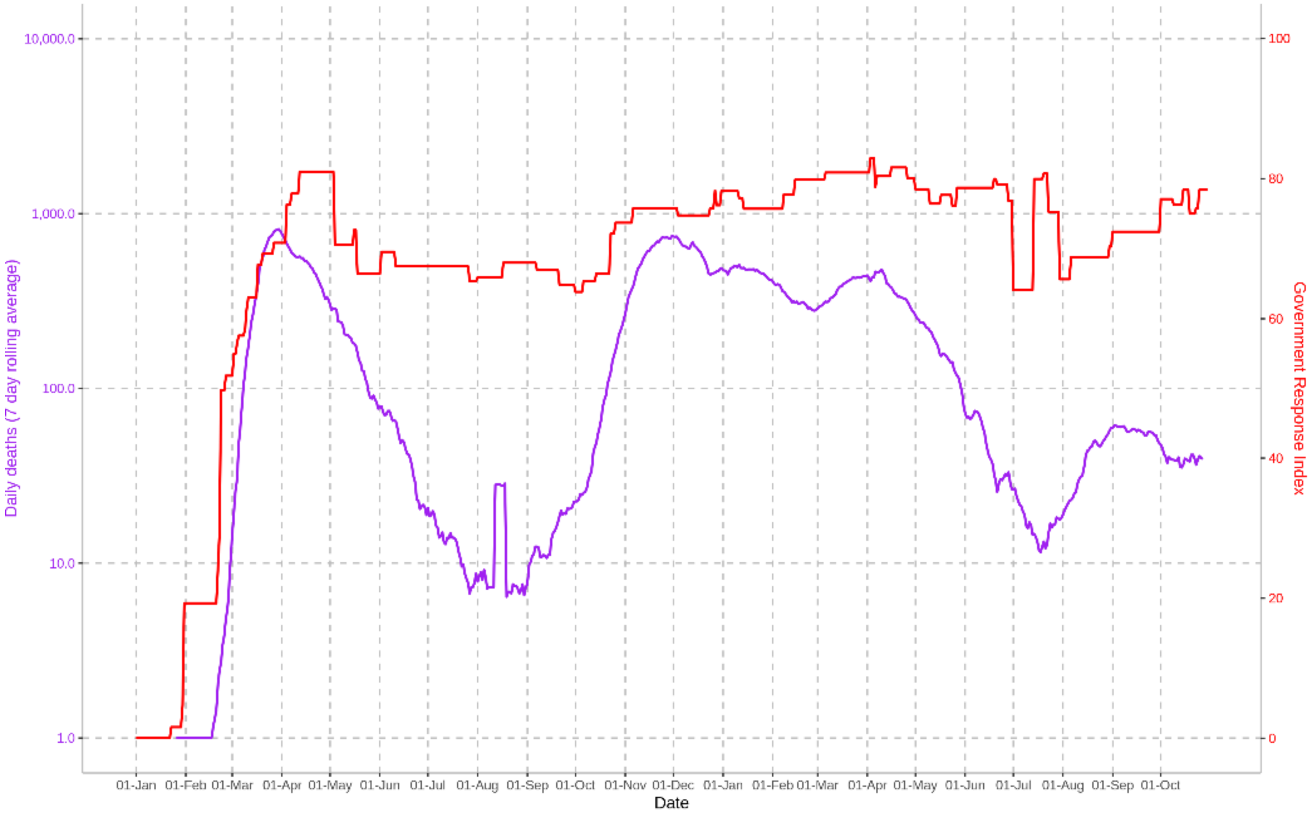

Germany's Covid-19 Trajectory
Daily deaths (7 day rolling average)
10,000.0
1,000.0
100.0
10.0
1.0
Government Response Index
100
80
60
40
20
0
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker

Indonesia's Covid-19 Trajectory

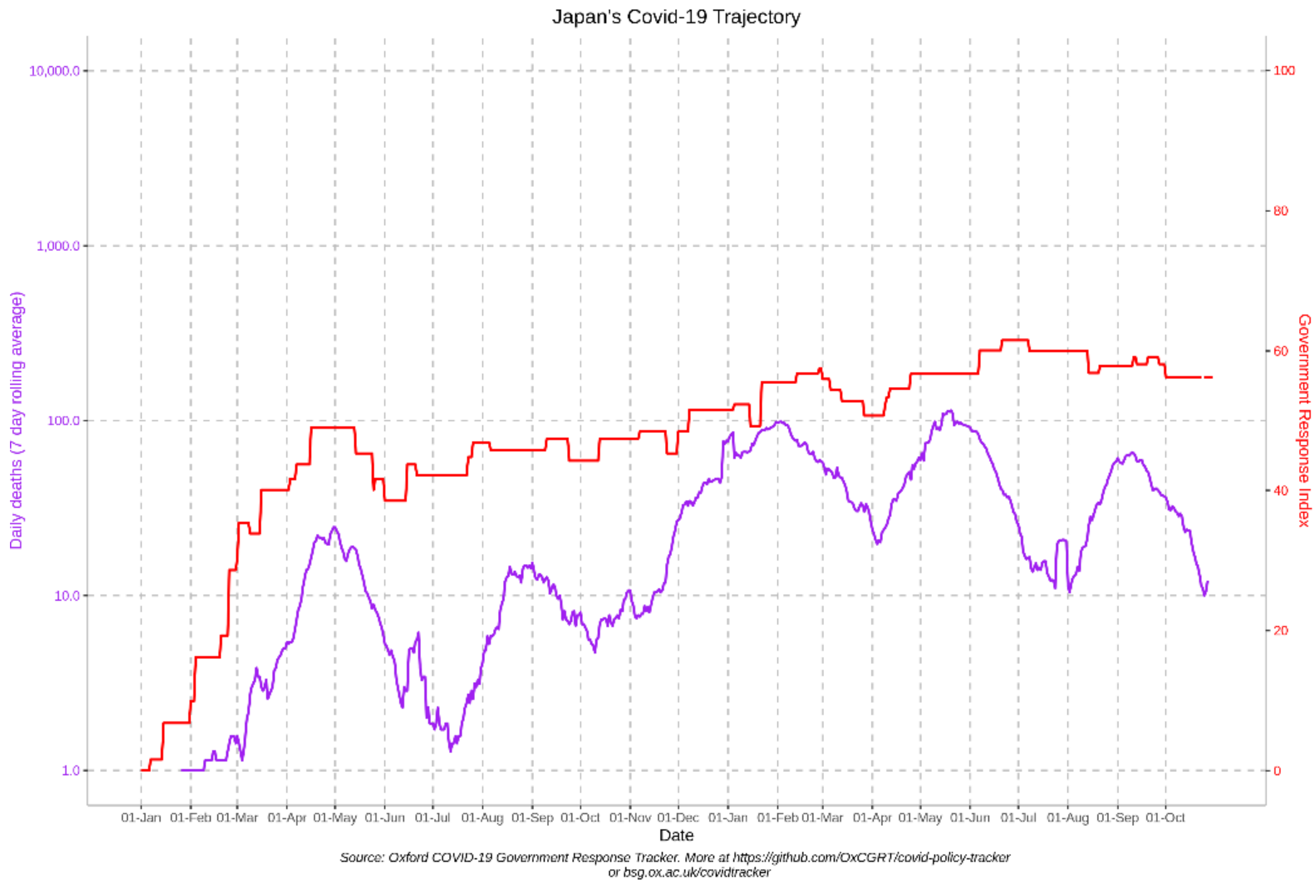


Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker or bsg.ox.ac.uk/covidtracker

Italy's Covid-19 Trajectory



Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker or bsg.ox.ac.uk/covidtracker


Japan's Covid-19 Trajectory
Daily deaths (7 day rolling average)
10,000.0
1,000.0
100.0
10.0
1.0
Government Response Index
100
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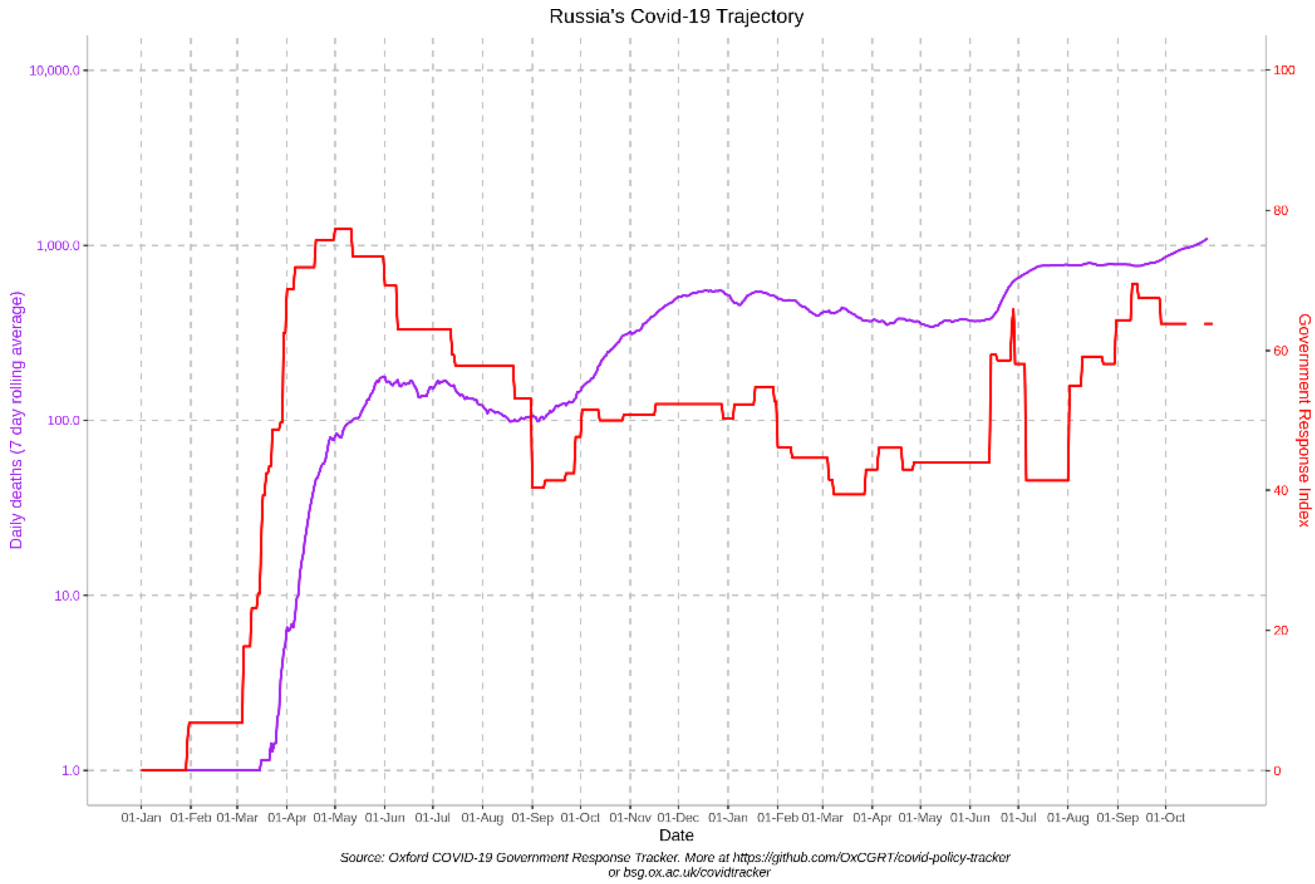
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker


Russia's Covid-19 Trajectory
Daily deaths (7 day rolling average)
10,000.0
1,000.0
100.0
10.0
1.0
Government Response Index
100
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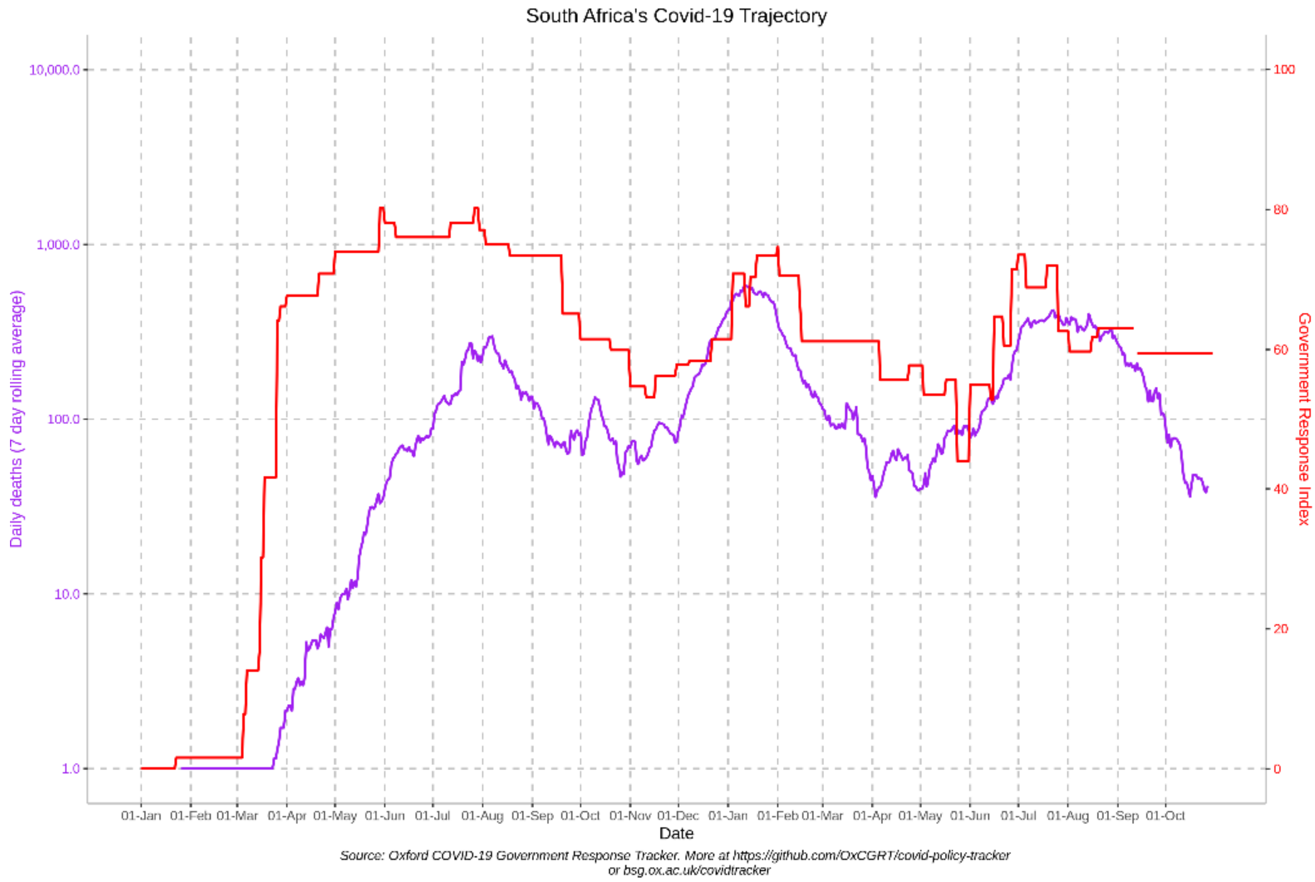
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker


South Africa's Covid-19 Trajectory
10,000.0
1,000.0
100.0
10.0
1.0
Daily deaths (7 day rolling average)
100
80
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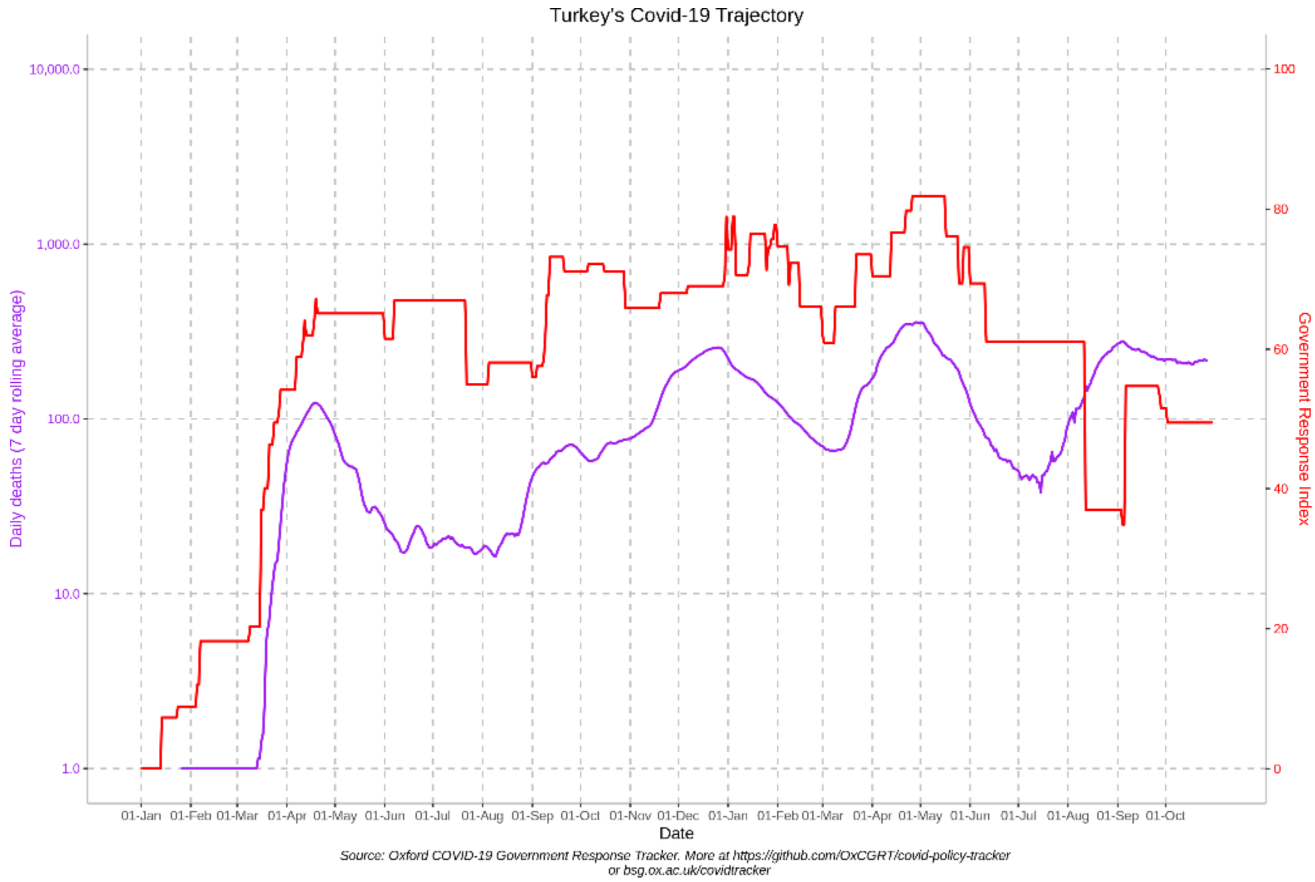
40
20
0
Government Response Index
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker


Turkey's Covid-19 Trajectory
10,000.0
1,000.0
100.0
10.0
1.0
Daily deaths (7 day rolling average)
100
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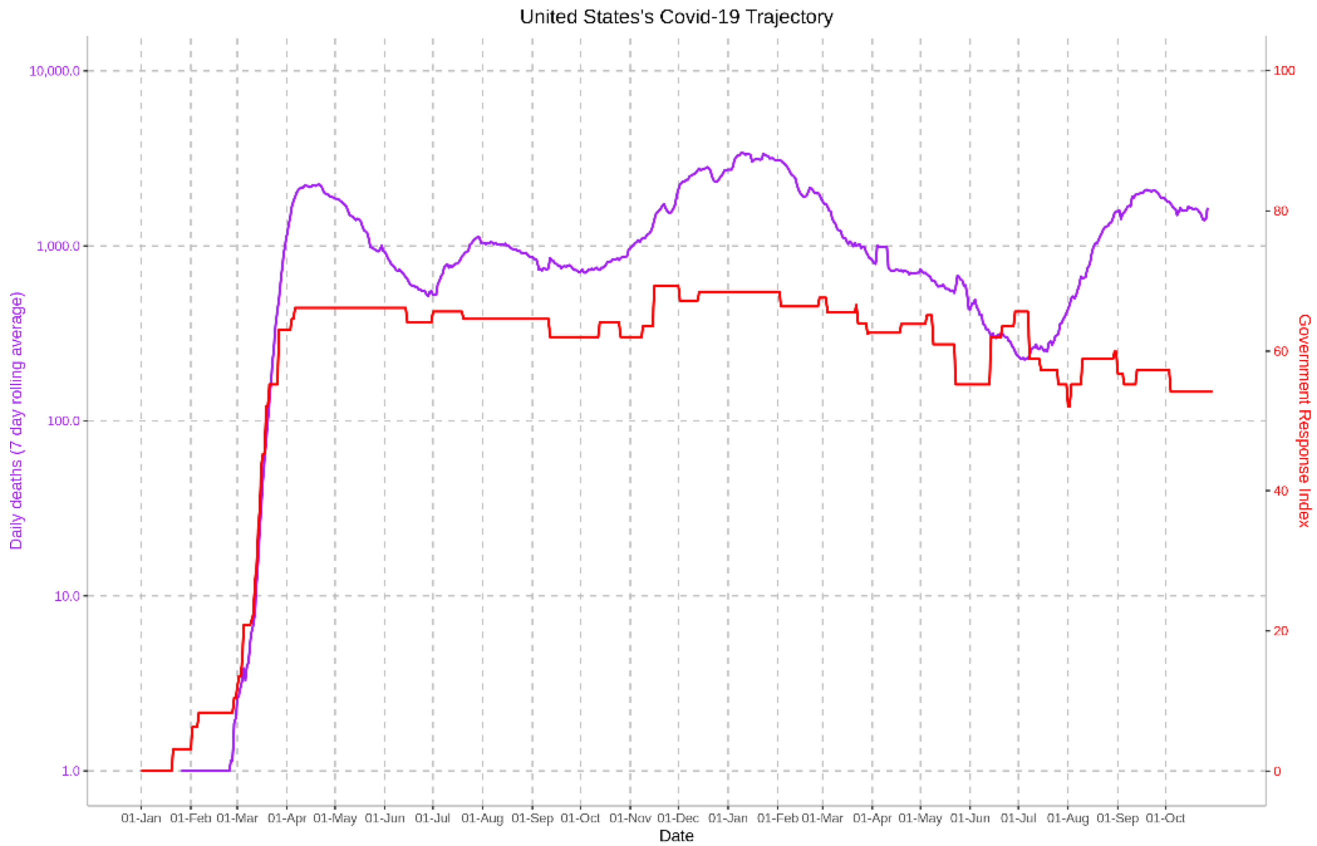
0
Government Response Index
01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct 01-Nov 01-Dec 01-Jan 01-Feb 01-Mar 01-Apr 01-May 01-Jun 01-Jul 01-Aug 01-Sep 01-Oct
Date
Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker
or bsg.ox.ac.uk/covidtracker



Source: Oxford COVID-19 Government Response Tracker. More at https://github.com/OxCGRT/covid-policy-tracker or bsg.ox.ac.uk/covidtracker

ANNEX II - COMPARISON MACROECONOMIC MEASURES ACROSS G20 MEMBER BASED ON IMF AND OECD POLICY TRACKERS – FIRST POLICY RESPONSE TO THE PANDEMIC, MARCH-SEPTEMBER 2020

	Estimated impact	COVID-19 infection	Containment measures					
G20 members	2020 GDP growth, WEO October 2021	Thousands cases/1000 persons	Stringency index			Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
			Value on 30/09/2020	Value at peak	Days at peak			
Argentina	-9.91%	16552.72	91.67	100	136	**Overall fiscal measures** Increase in fiscal spending worth about 6.0% of GDP, 3.9% in the budget and 2.1% off-budget. **Health system measures** Increased health spending, including for improvements in virus diagnostics, purchases of hospital equipment, construction of clinics and hospitals, and bonuses for healthcare workers. Centralisation of the sale of essential medical supplies. **Income support measures for individuals and households** Increased transfers to poor families (mainly one-off), social security benefits, unemployment insurance benefits, public food programmes, and payments to minimum-wage workers. Firing freeze for 3 months, if the reason of firing is related to the confinement measures or an unfair cause. **Public sector subsidies to businesses** Support for hard-hit sectors, including an exemption from social security contributions, grants to cover payroll costs, and subsidised loans for construction-related activities. **Public sector loans or capital injections** Credit guarantees for bank lending to SMEs for the production of foods and basic supplies. Public and private banks will support private companies with working capital for up to 180 days. Public sector loans at 0% to self-employed workers. **Regulatory measures** Adoption of anti-price gouging policies, including price controls for food and medical supplies. Ring-fencing of essential supplies, including certain export restrictions on medical supplies and equipment. No increase in mortgage loan payments.	**Policy rate** Policy rates cuts by more than 20 percentage points since January (from 55% to 38%) and strong increases in the monetary base in March and April. **Unconventional Monetary measures** None. **Regulatory/Macro prudential policies** Encouragement of bank lending through: • Lower reserve requirements on bank lending to households and SMEs; • Regulations that limit banks' holdings of central bank paper; • Temporary easing of bank provisioning needs and of bank loan classification rules. • A stay on both bank account closures due to bounced checks and credit denial to companies with payroll tax arrears.	A broad set of CFMs have been in place since August 2019, aimed at restricting financial account transactions and some current account transactions. These CFMs have helped limit outflows and allowed for a (modest) net purchase of FX in March and early April by the central bank. The exchange rate has depreciated by more than 21 percent vis-à-vis the US dollar since early March.
	Unemployment rate 2020, WEO October 2021	Thousands deaths /1000 persons	Starting of closure measures					
	11.55%	371.21	Measures to prevent a rapid growth in infections involve a full closure of borders and a nation-wide quarantine, beginning on March 20th and lasting until at least May 24th.					
	2020 Public deficit (% GDP), WEO October 2021	Excess death rate	Reopening of the economy					
	-11.42	n/a	The government's policy of moving from strict lockdown to a gradual reopening of the economy is contingent on the speed of contagion, defined as the length of time it takes for the number of reported cases to double. On May 8, with the doubling of contagions rising above 25 days, the government announced a gradual reopening aimed at raising regional mobilisation from 50 to 75 percent in all districts, except for the Buenos Aires metropolitan area. On May 23, restrictions in the Buenos Aires metropolitan area were tightened in response to an acceleration in infections and, in early June, the mandatory lockdown was extended to other selected large cities. Amidst a continued surge in infections, on June 26 restrictions on mobility were tightened further in the capital and the surrounding province. On July 17, the government announced a loosening of restrictions in the Buenos Aires metropolitan area and a phased reopening of activities. However, with infections continuing to rise, the mandatory lockdown has been extended, most recently until October 11, and with tighter enforcement in some inland provinces.					
	2020 Public debt (% GDP), WEO October 2021							
	102.79							

G20 members	Estimated impact	COVID-19 infection	Containment measures					
	2020 GDP growth, WEO October 2021	Thousands cases/1000 persons	Stringency index			Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
			Value on 30/09/2020	Value at peak	Days at peak			
Australia	-2.35%	1082.52	68.06	92	5	**Overall fiscal measures** Increase in fiscal spending worth about 13.5% of GDP, 11.7% in the budget and 1.8% off-budget. Parliamentary advance authorisation for unforeseen events. **Health system measures** Commitment to spend an additional 0.6% of GDP to strengthen the health system. **Income support measures for individuals and households** Sizable wage subsidies (5.4% of GDP). Across a large range of work types, employees will receive two weeks of unpaid pandemic leave. Income support to households with additional bonuses to vulnerable ones. Commitment to provide free childcare to around 1 mn families and announced targeted support to the education system. **Tax and contribution policy changes** Support for business investment, including by increasing the threshold for assets eligible for instant tax write-off and expanding this regime to larger firms. Deferral of taxes and social security contributions and bringing forward expenditures within current fiscal year. **Public sector subsidies to businesses** Cash flow support to businesses, investment incentives, and targeted measures for affected regions and industries. **Public sector loans or capital injections** Loan guarantees between the Commonwealth government and participating banks to cover the immediate cash flow needs of SMEs. Investment in residential mortgage backed securities and asset backed securities for small banks and non-bank financial institutions. **Subnational measures** Payroll tax relief for businesses. Relief for households, such as discount utility bills and cash payments to vulnerable households. Support for health spending. Construction and infrastructure packages.	**Policy rate** Cut by 25 basis points twice in March, to 0.25% (from .5%). **Unconventional Monetary measures** Yield targeting on 3-year government bonds at around 0.25 percent through purchases of government bonds in the secondary market. Increased rate of repo operations on both short and long-term maturities Broadening the range of eligible collateral for open market operations to include securities issued by non-bank corporations with an investment grade. Establishment of a term funding facility for access to three-year funding at 25 basis points with a focus on SME credit worth A$200 billion. **Swap lines** The RBA has established a swap line with U.S. Fed for the provision of US dollar liquidity in amounts up to US$60 billion. **Regulatory/Macro prudential policies** Temporary relief from capital requirement, as long as minimum capital requirements are met. Deferral of scheduled implementation of the Basel III reforms in Australia by one year to January 2023.	Flexible exchange rate, no interventions.
	Unemployment rate 2020, WEO October 2021	Thousands deaths /1000 persons	Starting of closure measures					
	6.50%	35.28	The government ordered complete confinement of the population from 20 March until 24 May. Non-compliance with measures was prosecuted as criminal offence. As of 27 April, provincial governments had the authority to decide on exemptions to the national quarantine, if certain epidemiological criteria are fulfilled.					
	2020 Public deficit (% GDP), WEO October 2021	Excess death rate	Reopening of the economy					
	-10.06	n/a	After the National Cabinet announced a three-step plan on May 8 to relax COVID-19 restrictions, States and Territories eased regional containment measures. However, overseas travel remains banned, and any arrivals in Australia are quarantined for 14 days. A recent regional COVID-19 resurgence triggered a renewed lockdown in metropolitan Melbourne from July 9. This was further tightened (stage 4 restrictions) on August 2. Restrictions (stage 3) were also put in place for the State of Victoria (outside of Melbourne) starting August 6. On September 6, the Victoria government announced a roadmap for easing restrictions, tied to declines in active COVID-19 cases. Stage 4 restrictions in metropolitan Melbourne have been extended through September 28. Some States and Territories have eased regional travel restrictions.					
	2020 Public debt (% GDP), WEO October 2021							
	57.33							

<table>
<tr><th></th><th>Estimated impact</th><th>COVID-19 infection</th><th colspan="6">Containment measures</th></tr>
<tr><th rowspan="2">G20 members</th><th rowspan="2">2020 GDP growth, WEO October 2021</th><th rowspan="2">Thousands cases/1000 persons</th><th colspan="3">Stringency index</th><th rowspan="2">Fiscal policy</th><th rowspan="2">Monetary and macro-financial policies</th><th rowspan="2">Exchange rate and BOP measures</th></tr>
<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="7">Brazil</td><td>-4.06%</td><td>22804.40</td><td>72.69</td><td>81</td><td>193</td><td rowspan="7">Overall fiscal measures
Additional fiscal measures adding up to nearly 14.6% of GDP, 8.3% in the budget and 6.3% off-budget. Exemption from provisions of Brazil's Fiscal Responsibility Law and the constitutional golden rule.

Health system measures
Increased spending worth 0.4% of GDP allocated to the public healthcare system, in addition to transfers to state and municipal governments who bear the main responsibility for public healthcare. Taxes and import duties on hospital goods are eliminated and import procedures eased. Bonus for certain healthcare workers.

Income support measures for individuals and households
Advancing the 13th pension payment to retirees. Expansion the Bolsa Familia program with the inclusion of over 1 million more beneficiaries. Temporary cash transfers to informal and unemployed workers (estimated cost: 1.3% of GDP). Advance payments of salary bonuses to low income workers. The government payed the first 15 days of sick leave for infected workers.

Tax and contribution policy changes
Mandatory employer contributions to training institutions halved for three months. A tax on bank loans suspended for three months. Some tax liabilities, especially for SMEs, have been deferred for three months.

Public sector subsidies to businesses
Formal workers and their employers could benefit from a new short-time work scheme with public income support from unemployment insurance.

Public sector loans or capital injections
Public banks expanded credit lines for businesses and households, to support working capital.

Subnational measures
Payroll tax relief for businesses. Relief for households, like discount utility bills and cash payments to vulnerable households. Support for health spending. Construction and infrastructure packages.</td><td rowspan="7">Policy rate
Policy rate lowered by 225 basis points since mid-February from 4.25%, to the historical low of 2%.

Unconventional Monetary measures
N/a

Swap lines
Swap organised with US Fed: the Fed has arranged to provide up to US$60 billion to the central bank through a swap facility that will remain in place for the next six months.

Regulatory/Macro prudential policies
Liquidity injection worth 17% of GDP, implemented through lower reserve and capital requirements and special liquidity lines for banks.</td><td rowspan="7">The exchange rate has depreciated by about 20 percent since mid-February and by 25 percent since end-2019. The central bank has intervened various times in the foreign exchange market since mid-February (both with spot and derivative contracts sales), by a total of 41 USD billion (about 12 percent of gross reserves). The central bank resumed repo operations of Brazilian sovereign bonds denominated in US dollars, having released US$9 billion into the money market thus far.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>13.50%</td><td>682.20</td><td colspan="3">No nationwide lockdown. 23 of Brazil's 27 federative units (states) imposed confinement measures, including school closures, restrictions to public gatherings and to non-essential services. Foreigners' entry through airports was restricted and borders were closed except for freight, Brazilians and foreign residents, and professionals from international organisations.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-16.78</td><td rowspan="3">+20%</td><td colspan="3" rowspan="3">n/a.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>98.94</td></tr>
</table>

G20 members	Estimated impact: 2020 GDP growth, WEO October 2021	COVID-19 infection: Thousands cases/1000 persons	Containment measures: Stringency index – Value on 30/09/2020	Stringency index – Value at peak	Stringency index – Days at peak	Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
Canada	-5.31%	4230.75	60.65	75	145	**Overall fiscal measures** Increase in fiscal spending worth 16.7% of GDP, 12.5% in the budget and 4.3% off-budget. **Health system measures** 0.9% of GDP to support increased testing, vaccine development, medical supplies, mitigation efforts, and greater support for Indigenous communities. **Income support measures for individuals and households** Overall support amounting to 10% of GDP. The largest measure under this heading is the Canada Emergency Response Benefit (CERB) with an estimated fiscal cost of around 1.5% of GDP. In addition, the government adopted: • a boost to the refundable credit that targets lower income households; • a temporary boost to the Canada Child Benefit, a doubling of the Reaching Home Program that provides funding for the homeless, the establishment of a new fund to help Indigenous communities, and a six-month moratorium on repayment of student loans; • a nationwide top-up scheme for low-wage essential workers. **Tax and contribution policy changes** Tax payment deferrals regarding corporate-income tax, sales tax remittance and customs duty payments. **Public sector subsidies to businesses** The largest fiscal support scheme for business is the Canada Emergency Wage Subsidy (CEWS) that provides up to 75% wage subsidy for up to 3 months amounting to slightly under 3% of GDP. Extension of the Work Sharing program from 38 to 76 weeks. **Public sector loans or capital injections** The Business Credit Availability Program (BCAP) (valued at CAD 81 billion) includes the Small and Medium-sized Enterprise Loan and Guarantee program and the Canada Emergency Commercial Business Account. Large Employer Emergency Lending Facility (LEEFF), bridging financing to businesses with revenues above CAD 300 billion. Other lending support includes the Canada Emergency Commercial Rent Assistance program, and support to agriculture sector.	**Policy rate** Reducing the policy rate by 150 bps in March to 0.25%. **Unconventional Monetary measures** Extension of the bond buyback program across all maturities. Launching the Bankers' Acceptance Purchase Facility. Set-up of the Standing Term Liquidity Facility (SLF), under which loans could be provided to eligible financial institutions in need of temporary liquidity support. Expanding the list of eligible collateral for Term Repo operations to the full range of eligible collateral for the SLF, except the Non-Mortgage Loan Portfolio (NMLP). Announcing a temporary increase the amount of NMLP a participant can pledge for the SLF and for those participants that do not use NMLP. Set-up of the Provincial Money Market Purchase (PMMP) program, the Provincial Bond Purchase Program (PBPP), the Commercial Paper Purchase Program (CPPP), the Corporate Bond Purchase Program (CBPP), and the purchase of Government of Canada securities in the secondary market. Supporting the Canada Mortgage Bond (CMB) market by purchasing CMBs in the secondary market. **Swap lines** Swap liquidity line with the US Fed. **Regulatory/Macro prudential policies** Lowering the Domestic Stability Buffer to 1 percent of risk weighted assets (previously 2.25 percent); Under the Insured Mortgage Purchase Program, the government purchased up to $150 billion of insured mortgage pools through the Canada Mortgage and Housing Corporation (CMHC).	Flexible exchange rate, no interventions.

	Unemployment rate 2020, WEO October 2021	Thousands deaths /1000 persons	Starting of closure measures
Canada	9.60%	250.43	Canada's containment measures came into force from mid to late March. Provinces and territories, as well as the federal government, played a key role. States of emergency and other measures, brought school closure, regulation on social distancing, operational restrictions on various types of businesses, and strong public health advice for people to remain at home.

	2020 Public deficit (% GDP), WEO October 2021	Excess death rate	Reopening of the economy
Canada	-19.92	n/a	On April 28, Prime Minister Trudeau released a joint statement with premiers across Canada on their shared public health approach to support restarting the economy; all provinces have begun to implement plans to reopen.

	2020 Public debt (% GDP), WEO October 2021
Canada	117.46

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<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="7">China</td><td>2.34%</td><td>65.00</td><td>45.83</td><td>84</td><td>195</td><td rowspan="7">Overall fiscal measures
Increase in fiscal spending worth 5.9% of GDP, 4.6% in the budget and 1.3% off-budget.

Health system measures
Increased spending on epidemic prevention and control.
Increased production of medical equipment.

Income support measures for individuals and households
Accelerated disbursement of unemployment insurance and extension to migrant workers.
Tax relief and waived social security contributions.

The overall public sector expansion is expected to be significantly higher, reflecting the effect of improvements of the national public health emergency management system, additional support through state-owned enterprises, and automatic stabilisers.</td><td rowspan="7">Policy rate
1 and 5-year benchmark rate lowered by 10bp in February, but unchanged in March, 1-year lowered by 20 bp and 5-year by 10 bp in April. The base rate is now at 3.85%.
Reduction of the 7-day and 14-day reverse repo rates by 30 bps, as well as the 1-year medium-term lending facility (MLF) rate and targeted MLF rate by 30 and 20 bps.
Reduction of the interest on excess reserves from 72 to 35 bps.

Unconventional Monetary measures
Liquidity injection of RMB 4.2 trillion (gross) into the banking system via open market operations (reverse repos and medium-term lending facilities).
Targeted RRR cuts by 50-100 bps for large- and medium-sized banks that meet inclusive financing criteria which benefit micro- and small-sized enterprises (MSEs), an additional 100 bps for eligible joint-stock banks, and 100 bps for small- and medium-sized banks in April and May to support SMEs.
Expansion of re-lending and re-discounting facilities to support manufacturers of medical supplies and daily necessities firms and the agricultural sector at low interest rates.

Regulatory/Macro prudential policies
Delay of loan payments and eased loan size restrictions for online loans, and other credit support measures for eligible SMEs and households.
Tolerance for higher NPLs and reduced NPL provision coverage requirements. Additional financing support for corporates via increased bond issuance by corporates, including relaxing rules on insurers for bond investments.
Easing of housing policies by local governments.</td><td rowspan="7">The exchange rate has been allowed to adjust flexibly.
A ceiling on cross-border financing under the macro-prudential assessment framework was raised by 25% for banks, non-banks and enterprises.
Restrictions on the investment quota of foreign institutional investors (QFII and RQFII) were removed.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>4.24%</td><td>3.40</td><td colspan="3">The government imposed strict containment measures, including the extension of the national Lunar New Year holiday, the lockdown of Hubei province, large-scale mobility restrictions at the national level, social distancing, and a 14-day quarantine period for returning migrant workers.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-11.89</td><td rowspan="3">n/a</td><td colspan="3" rowspan="3">From 25 March the lockdown measures are lifted in Hubei Province and from 8 April in the provincial capital, Wuhan. With regards to the country overall, starting in mid-February, the government has gradually removed mobility and activity restrictions, prioritising essential sectors, specific industries, regions, and population groups based on ongoing risk assessments. Most businesses and schools have reopened nationwide, but social distancing rules remain in place at the micro level and foreign entry remains restricted to contain imported cases. Localised movement restrictions were re-imposed in new hotspots, including in the northeastern Jilin and Heilongjiang province, and more recently in Beijing, Xinjiang, and Dalian. As of August 27, all these regions (except certain areas in Xinjiang) have lowered their emergency response level to Level III (low risk). Testing and individualised health QR codes are used to gauge the path of the virus and contain outbreaks.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>66.33</td></tr>
</table>

	Estimated impact	COVID-19 infection	Containment measures					
G20 members	**2020 GDP growth, WEO October 2021**	**Thousands cases/1000 persons**	**Stringency index**			**Fiscal policy**	**Monetary and macro-financial policies**	**Exchange rate and BOP measures**
			Value on 30/09/2020	**Value at peak**	**Days at peak**			
France	-7.99%	8219.25	46.76	88	55	**Overall fiscal measures** An additional fiscal envelope has been planned to a total of 5.2% of GDP. This adds to a package of public guarantees of more than 15.7% of GDP. On September 3rd, the government announced a new fiscal package to support the recovery of (“Plan de Relance”) amounting to 100 billion euros over two years. 40 billion to be covered from the EU Recovery Fund. **Health system measures** 0.01% of GDP for hospitals have been allocated out of unspent reserves in the 2019 budget. Payments of 0.14% of GDP from the 2020 allocation have been brought forward. EUR 4.5 billion of additional funds for the purchase of equipment and other health expenses. **Income support measures for individuals and households** Increased sick leave reimbursements for affected workers, extension of social rights (minimum welfare benefits, benefits for disabled people), extension of unemployment benefits, and additional transfers to the poorest households. **Tax and contribution policy changes** Tax exemptions for bonuses in "essential" sectors. Postponement of payments of social security contributions and taxes, early repayment of 2020 corporate tax claims and accelerated processing of VAT credit claims. **Public sector subsidies to businesses** Direct financial support through a “solidarity fund” for affected microenterprises, liberal professions, and independent workers. Implementation of a fund to support the cash flow of start-ups. Short-time work scheme. **Public sector loans or capital injections** State-guaranteed treasury loan of up to 25% of annual turnover or 2 years of payroll for newly created or innovative companies. Temporary increase in state-ownership for some firms (up to EUR 20 bn). Scheme enabling the State to provide for a state guarantee between 70% and 90% of the loan. Activation of public reinsurance on outstanding credit insurance (up to EUR 10 bn).	For monetary policy at the currency union level, please see under the European Union. Country-specific measures include: Reducing the counter-cyclical bank capital buffer to 0 percent; a temporary ban on short-selling stocks in place until May 18; credit mediation to support renegotiation of SMEs’ bank loans.	Flexible exchange rate, no interventions.
	Unemployment rate 2020, WEO October 2021	**Thousands deaths /1000 persons**	**Starting of closure measures**					
	8.00%	476.01	In mid-March the government introduced a range of measures to reduce the spread of COVID-19, including school closures, the ban of all non-essential activities, outings and long-distance travel, and the introduction of night-time curfews in some cities.					
	2020 Public deficit (% GDP), WEO October 2021	**Excess death rate**	**Reopening of the economy**					
	-10.77	+31%	As of May 11, France started to ease the containment measures, beginning with the reopening of primary schools, shops, and industry, on a differentiated regional basis. Most major domestic restrictions were lifted as of June 22. Internal and intra-European travel restrictions have also been lifted. In response to the recent uptick in infections, limits on large gatherings have been extended until the end of October, testing ramped up, and mask mandates tightened with the use of masks obligatory in most public spaces and indoor areas (including schools and workplaces). Selective regional restrictions have also been imposed in high-infection areas including Paris.					
	2020 Public debt (% GDP), WEO October 2021							
	115.08							

G20 members	Estimated impact	COVID-19 infection	Containment measures					
	2020 GDP growth, WEO October 2021	Thousands cases/1000 persons	Stringency index			Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
			Value on 30/09/2020	Value at peak	Days at peak			
Germany	-4.56%	3488.77	49.54	77	46	**Overall fiscal measures** Fiscal spending at the federal level for a total of about 8.4% of GDP in-budget. Länder and municipalities have announced own measures to support their economies amounting to €141 billion in direct support and €63bn in state-level loan guarantees. **Health system measures** Federal government to provide EUR 2.8 billion in 2020, additional funding will come from health insurance. Additional central procurement of special equipment on federal level. Agreement of federal level and Länder to expand hospital capacities for COVID. **Income support measures for individuals and households** Access to social benefits eased for six months. Parents, who temporarily lose income, benefitted from child allowance (Kinderzuschlag). In August, the government extended the maximum duration of short-term work benefits from 12 to 24 months. **Tax and contribution policy changes** Tax deferrals are possible and tax prepayments can be adapted to expected lower income in 2020. Taxpayers allowed to carry back their 2020 tax losses against advance tax payments. Temporary VAT reduction. **Public sector subsidies to businesses** The "short-time" work scheme easier to access temporarily. In addition to compensating 60% of the difference in monthly net earnings due to reduced hours, social-security contributions for the lost work hours are to be covered by the labour agency. Direct support to self-employed and micro firms of up to EUR 15 000 per firm (total of EUR 50 billion foreseen). **Public sector loans or capital injections** Providing liquidity to affected firms through programs of the KfW with unlimited credit. Economic stabilisation fund for larger companies with 250 employees or more with EUR 100 billion for recapitalisation. EUR 400 billion of guarantees for corporate liabilities, and a credit authorisation for EUR 100 billion to the KfW for refinancing purposes. EUR 2 billion for co-investment in start-ups.	For monetary policy at the currency union level, please see under the European Union. Country-specific measures include: €100 billion to directly acquire equity of larger affected companies and strengthen their capital position. Release of the countercyclical capital buffer for banks from 0.25 percent to zero. A payment moratorium on consumer loans established before March 15th is granted until June 30th 2020 if the debtor is financially affected by the COVID-19 crisis. Additional €100 billion to refinance expanded short-term liquidity provision to companies through the public development bank KfW, in partnership with commercial banks; Loans issued under KfW guarantees are exempt from the calculation of lenders' own funds requirement, their leverage ratio, as well as the large exposure limit.	Flexible exchange rate, no interventions.
	Unemployment rate 2020, WEO October 2021	Thousands deaths /1000 persons	Starting of closure measures					
	3.83%	114.45	The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.					
	2020 Public deficit (% GDP), WEO October 2021	Excess death rate	Reopening of the economy					
	-8.18	+5%	On April 20th, smaller shops re-opened subject to social distancing requirements. Select grades in schools gradually re-opened on May 4th, as did cultural and leisure venues. On May 6th, the government announced further easing of containment measures extending to all shops, restaurants and sports facilities, with the exact timeline to be determined at state level. Re-opening is subject to an "emergency brake", whereby an occurrence of more than 50 new infections per 100.000 inhabitants over 7 days will require state governments to reverse the re-opening and re-institute containment. Border controls to neighboring countries are being gradually lifted starting May 16th. On May 26th, federal and state governments agreed to ease restriction on public gatherings for up to 10 people or two separate households subject to minimum distancing and face mask requirement in public places. On June 16th, the government launches a Corona Warning App that allows users to trace potential contact with Covid-infected individuals on a voluntary and anonymous basis. On July 1st, the entry restriction for travelers from 11 non-EU countries is lifted (3 of which conditional on reciprocity). In light of the rising number of new infections in Germany since the summer vacation season, a mandatory COVID-19 test requirement for people entering from around 130 "high risk" countries upon their arrival came in effect on August 8th. Mass events remain banned until at least end-2020 and some local governments have tightened limitations on public gatherings.					
	2020 Public debt (% GDP), WEO October 2021							
	69.06							

G20 members	Estimated impact	COVID-19 infection	Containment measures					
	2020 GDP growth, WEO October 2021	Thousands cases/1000 persons	Stringency index: Value on 30/09/2020	Stringency index: Value at peak	Stringency index: Days at peak	Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
India	-7.25%	4602.81	75.46	100	41	**Overall fiscal measures** Overall support to the economy raised to about 7% of GDP (above the line measures are 1.8% and below the line measures 5.2%), including fiscal and liquidity measures. **Health system measures** Additional 0.1% of GDP devoted to health infrastructure and Covid treatment. Insurance cover of INR 5 million per health worker fighting COVID-19 to be provided under Insurance Scheme. **Income support measures for individuals and households** Increased transfers in-kind (food, cooking gas) and cash transfers to lower-income households. Increase in wage for workers engaged in the rural public employment programme (MNREGA) to benefit 136.2 million families. An ex-gratia of INR 1,000 to 30 million poor senior citizen, poor widows and poor disabled. 1.6% of GDP programme focusing on migrant workers including rental support, public ration cards, free food distribution. Credit facility for street vendors and an expansion of food provision for non-ration card holders (mainly migrants). **Tax and contribution policy changes** The government committed to pay employee provident fund contributions on behalf of employees and employers for 6 months. Amendment of pension regulations (early withdrawal) and postponement of some tax-filing and other compliance deadlines. Refunds to charitable trust, non-corporate businesses and professions to be issued immediately. **Public sector loans or capital injections** Government measures targeting businesses: (i) collateral-free lending program with 100% guarantee (1.9% of GDP), (ii) subordinate debt for stressed MSMEs with partial guarantee, and (iii) partial credit guarantee scheme for public sector banks on borrowings of non-bank financial companies, housing finance companies (HFCs), and micro finance institutions. The government also announced (i) a Fund of Funds for equity infusion in MSMEs, and (ii) a special purpose vehicle (SPV) to purchase short-term debt of the eligible non-bank financial companies and housing finance companies, guaranteed by the government.	**Policy rate** Reduced the repo and reverse repo rates cuts by an overall 115 bps and 155bps to 4.0% and 3.35%, respectively. **Unconventional Monetary measures** The RBI's policy measures since February 8 represent liquidity injection of around 4 percent of GDP. Initial Liquidity measures to the tune of 4.7% of GDP through August across three measures comprising: Long Term Repo Operations (LTROs), a cash reserve ratio (CRR) cut of 100 bps, and an increase in marginal standing facility (MSF) to 3 percent of the Statutory Liquidity Ratio (SLR). Additional RBI announcement of a special liquidity facility for mutual funds for up to INR 500bn (USD 6.7bn). Second a TLTRO-2.0 for an initial amount of around 0.2 percent of GDP, in extension of the initial TLTRO program of around 0.4 percent of GDP. **Regulatory/Macro prudential policies** Threshold for invoking insolvency has been raised 100-fold to INR 10 million. The CRR exempted for all retail loans to ease funding costs. The RBI has provided relief to both borrowers and lenders, allowing companies a three-month moratorium on loan repayments and the Securities and Exchange Board of India temporarily relaxed the norms related to debt default on rated instruments.	2 FX swaps comprised of $2 billion dollars, 6 months, auction-based each. Limit for FPI investment in corporate bonds increased to 15 percent of outstanding stock for FY 2020/21. Restriction removed on non-resident investment in specified securities. Foreign direct investment policy adjusted to require that an entity of a country that shares a land border with India can invest only after receiving the government approval.
	Unemployment rate 2020, ILOSTAT	**Thousands deaths /1000 persons**	**Starting of closure measures**					
	7.11%	72.08	Prime Minister Modi announced on March 24 a lockdown for the next 21 days, now further extended to May 17. Prior to this announcement, numerous containment measures had already been imposed, varying in intensity across the country, including travel restrictions (complete restriction of incoming international commercial passenger aircraft and some restrictions on domestic travel including cancellation of domestic passenger air traffic); closing educational establishments, gyms, museums, and theatres; bans on mass gatherings; and encouraging firms to promote remote work.					
	2020 Public deficit (% GDP), WEO Oct. 2021	**Excess death rate**	**Reopening of the economy**					
	-13.08	n/a	On April 15, with a view to supporting economic activities, the government announced several relaxation measures in geographical areas designated as non-hotspot, with effect from April 20, 2020. On April 29, the government permitted inter-state movement of stranded people, including migrant workers, managed by the nodal authorities who are designated by the states. Some graded relaxations in economic activities have been allowed in geographic areas designated as orange and green zones on May 4 and domestic air travel restarted on May 25. On May 12, the PM announced a relief package of around 10 percent of GDP, including previously announced monetary and fiscal measures. On July 29, the central government issued 'Unlock 3.0' guidelines further paving the way for a phased re-opening of activities across the country and limiting the lockdown only to containment zones till August 31. On August 29, the government issued new guidelines ('Unlock 4.0') to further re-open the economy in September, removing restrictions on metro rail in a graded manner from 7 September, and allowing for social, academic, sports, entertainment, and other congregations of up to 100 people. Education institutions will remain closed till end-September, with lockdowns continuing to be implemented in containment zones.					
	2020 Public debt (% GDP), WEO October 2021							
	89.61							

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<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="7">Indonesia</td><td>-2.07%</td><td>1056.12</td><td>68.98</td><td>80</td><td>59</td><td rowspan="7">Overall fiscal measures
Three fiscal packages and a later expansion amounting to a total stimulus of 3.8% of GDP.

Health system measures
17.2 trillion rupiah (USD 1.1 bn) of budget reallocated for healthcare, topped up with additional budget of IDR 75 trillion.
IDR 6.1 trillion of incentives for medical staff dealing with COVID-19.

Income support measures for individuals and households
Increased benefits and broader coverage of existing social assistance schemes to low-income households such as food aid, conditional cash transfers, and electricity subsidy.
Exemption from income tax for six months manufacturing workers with annual income below IDR 200 million (budget of IDR 8.6 trillion). Provision of housing interest subsidies for the bottom 40% (budget of IDR 1.5 trillion).
Expanded unemployment benefits, including for workers in the informal sector.

Tax and contribution policy changes
Corporate income tax reduced by 3 percentage points to 22% over 2020-21 and to 2% starting in 2022. IDR 70 trillion to be used for tax incentives and SMEs support.
Reducing corporate tax payments for manufacturing companies (IDR 12.5 trillion).

Public sector subsidies to businesses
Financing and credit restructuring for SMEs.

Public sector loans or capital injections
Government IDR 150 trillion intervention, with direct support to some SOEs (via investment in working capital and accelerated compensation payments)
Indirect support (IDR 35 trillion) to business channelled through certain banks which will receive public funds to provide loan restructuring and additional loans.</td><td rowspan="7">Policy rate
Reduction of the policy rate by 100 bps cumulatively to 4%.

Unconventional Monetary measures
Purchase government bonds in the primary market during the latest Islamic bonds auction.
Maximum duration for repo and reverse repo operations increased up to 12 months.
Introduced daily repo auctions and increased the size of the main weekly refinancing operations.

Regulatory/Macro prudential policies
Cut the reserve requirement ratio by 200 basis points for conventional banks and 50 basis points for Islamic banks.
Macro prudential liquidity buffer ratio raised by 200 basis points for conventional banks and 50 basis points for Islamic banks, to be fulfilled only via government bonds purchased in the primary market.
Cut on the USD reserve requirement ratio (RRR) to 4% from 8% and the rupiah RRR by 50 basis points.</td><td rowspan="7">The Central Bank intervened in the spot and domestic non-deliverable foreign exchange markets, and in the domestic government bond market to maintain orderly market conditions.
The frequency of FX swap auctions for 1, 3, 6 and 12-month tenors was increased from three times per week to daily auctions.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>7.07%</td><td>39.60</td><td colspan="3">The government adopted various containment measures, including temporary bans on domestic and international air and sea travel, screening at ports of entry, school closures, and other restrictions on public events. The government also banned Indonesia's traditional annual exodus for Muslim holidays in an effort to curb the spread of the virus from Jakarta and other high-risk regions.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-6.32</td><td rowspan="3">+55% (Jakarta)</td><td colspan="3" rowspan="3">In June, Indonesia began easing some containment measures. The city of Jakarta started a transitional phase from large-scale social restrictions on June 5th and further eased restrictions on malls (on June 15) and parks and recreation areas (on June 20). However, the city of Jakarta has extended the transitional phase from large-scale social restrictions through September 10 in the absence of a sustained decline in daily new virus cases. On September 9, Jakarta's governor announced that large-scale social restrictions would be tightened further to contain the spread of the virus.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
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<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="7">Italy</td><td>-8.87%</td><td>5182.30</td><td>43.52</td><td>94</td><td>59</td><td rowspan="7">Overall fiscal measures
Overall fiscal stimulus package for a total of 37.9% of GDP, 4.9% in budget and 33.0% off-budget. On August 15, additional EUR 25 bn August decree announced, taking overall 2020 financing needs to EUR 100 bn.

Health system measures
Funds to strengthen the Italian health care system and civil protection €6.5 bln (€3.2+ 3.3 in two different decrees including EUR 1.4 bln to raise funding for the health care system for 2020, and EUR 845 m to recruit 20 000 more health workers.
Measures to increase purchases and production of medical materials. Repurposing of medical equipment and buildings (e.g. hotels) for the medical emergency.

Income support measures for individuals and households
Wage supplementation scheme for furloughed employees strengthened and increased last-resort fund for workers not qualifying for these measures. Ordinary wage supplementation schemes for both fims that use “cassa integrazione guadagni straordinaria” the “cassa integrazione in deroga”. A Last Resort scheme established for workers not qualifying (EUR 300 m). One-off EUR 600 payment to various categories of self-employed and seasonal workers. One-year suspension in the repayment of real estate mortgages by workers having lost their job. Allowance of EUR 500 per month for up to 3 months for self-employed workers in the municipalities most affected.
Strengthen childcare support for children and childcare payment to employees in the healthcare and law enforcement sectors. Moratorium on debt payments, including mortgages.

Tax and contribution policy changes
EUR 540 m for 60% tax credit on commercial rents; suspension for 2 months of tax and social security payments in the municipalities most affected.
Suspension of all the tax and social security payments coming due in March for firms with an annual turnover below EUR 2 m. Non-application of withholding tax for professionals without employees, with revenues below EUR 400 000 until 31 May 2020.

Public sector subsidies to businesses
Measures to support businesses, including grants for SMEs and tax deferrals for a total of €22 billion. Suspension of 6 months of loan repayment by SMEs.

Public sector loans or capital injections
Liquidity Decree allowed for additional state guarantees of up to €400 billion (25 percent of GDP).
State guarantee to the state development bank—Cassa Depositi e Prestiti—to support lending and liquidity to banks to enable them to finance medium- and large-sized companies; con-insurance scheme for exporters.</td><td rowspan="7">For monetary policy at the currency union level, please see under the European Union.

Country-specific measures include:
Less significant banks and non-bank intermediaries are allowed to operate temporarily below the level of the Pillar 2 Guidance, the capital conservation buffer and the liquidity coverage ratio.
Their deadline to submit their revised NPL reduction plans is postponed to 30 June.</td><td rowspan="7">Flexible exchange rate, no interventions.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>9.31%</td><td>593.96</td><td colspan="3">The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-12.98</td><td rowspan="3">+44%</td><td colspan="3" rowspan="3">The nation-wide lockdown expired on May 4. Since then, manufacturing and construction reopened under new safety rules (e.g., staggered shifts, spaced workstation, temperature checks, masks). The government moved forward some of the reopening plans. In addition to retail shops, restaurants, cafes and hairdressers reopened on May 18 (the initial reopening plan was June 1). Sports facilities reopened on May 25, followed by cinemas and theatres on June 15. Regional governments are allowed the discretion to adjust the dates in both direction. People can now travel within their own region, and mobility restrictions across regions has been lifted on June 3, when international borders also reopen without restriction to and from other EU countries. Following the increase in confirmed cases in early August, re-closures of night clubs are in place until September 7. The obligation to wear masks in public places (including outdoors) is reinforced. Checks at airports will be more intensive.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>155.81</td></tr>
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<tr><th></th><th>Estimated impact</th><th>COVID-19 infection</th><th colspan="6">Containment measures</th></tr>
<tr><th rowspan="2">G20 members</th><th rowspan="2">2020 GDP growth, WEO October 2021</th><th rowspan="2">Thousands cases/1000 persons</th><th colspan="3">Stringency index</th><th rowspan="2">Fiscal policy</th><th rowspan="2">Monetary and macro-financial policies</th><th rowspan="2">Exchange rate and BOP measures</th></tr>
<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="7">Japan</td><td>-4.59%</td><td>656.21</td><td>31.48</td><td>67</td><td>5</td><td rowspan="7">Overall fiscal measures
Two packages worth a total of ¥234.2 trillion, or 35.0% of GDP (of which 11.3% in budget and 23.7% off-budget).

Health system measures
Preventive measures against the spread of infection and strengthen treatment capacity in April. Production, procurement and distribution of critical equipment. Transfers to local governments for health and longer care related measures including cash handouts for medical professionals. General health-related measures including vaccine development. On 28 August, the government launched a new package of health measures, The measures cover: 1) an significant increase of the PCR testing capacity by the end of 2020; 2) universal supply of vaccines for all residents by mid-2021; 3) support for local governments' efforts in expanding medical and health centres capacity.

Income support measures for individuals and households
Easing of the qualifications and increasing the subsidy rates for the Employment Adjustment Subsidy, which helps cover the cost of special paid leaves especially for SMEs. Cash transfer provided for every resident (JPY 100 thousand) for a total of 2.4% of GDP. Additional Cash transfer targeted at low-income single-parent households (0.02% of GDP). The FY 2020 second supplementary budget include: Cash transfer of JPY 136.5 billion (0.02% of GDP) Further enhancement of the Employment Adjustment Subsidy of JPY 1.3 trillion (0.2% of GDP).

Tax and contribution policy changes
Deadline extension for tax return filing and payment of personal income tax, gift tax, and consumption tax. Tax payments and social security charges for businesses negatively impacted by the COVID-19 outbreak can be deferred up to one year.

Public sector subsidies to businesses
Cash transfer of JPY 2 trillion (0.4% of GDP) for SMEs and JPY 1mln for self employed workers who experience a significant fall of earnings between February and June.
A range of subsidies to strengthen the economic structure including subsidies of financial institutions lending, replenishment of cash transfers for firms, and subsidies for rent payment.

Public sector loans or capital injections
PY 500 billion (0.1% of GDP) of emergency loans and credit guarantees for SMEs such as the tourism industry. JPY 45 trillion from the Japan Finance Corporation and other institutions, primarily focusing on micro, and SMEs which enables unsecured interest-free loans to affected firms.</td><td rowspan="7">Policy rate
No change.

Unconventional Monetary measures
Active purchasing; facilitation of corporate financing through (a) increasing the upper limit to purchase commercial paper and corporate bonds and (b) introducing a new operation to provide loans against corporate debt as collateral at 0% interest rate with maturity up to one year. Tripling the corporate bond and commercial paper purchase facility. Special operation to cover business loans provided, based on the government's emergency loan programme scaled up from JPY 25 trillion (4.5% of GDP) to JPY 55 trillion (10.1% of GDP).
Provision of further ample funds through various means including purchases of Japanese government bonds and U.S. dollar funds-supplying operations. Lifting annual Japanese government bonds purchase benchmark.

Regulatory/Macro prudential policies
The Financial Services Agency (FSA) has reassured banks that they can assign zero risk weights to loans guaranteed under public guarantee schemes, draw down their capital conservation and systemically important bank buffers to support credit supply, and draw down their stock of high-quality liquid assets below the minimum liquidity coverage ratio requirement. The FSA has also asked banks to defer principal payments on mortgage loans as needed, and refrain from charging fees for modifying mortgage loan conditions.</td><td rowspan="7">The BoJ in coordination with the Bank of Canada, the Bank of England, the European Central Bank, the Federal Reserve and the Swiss National Bank enhanced the provision of U.S. dollar liquidity on 15 March, by lowering the pricing on the standing U.S. dollar liquidity swap arrangements by 25 basis points.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>2.79%</td><td>12.36</td><td colspan="3">The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-14.15</td><td rowspan="3">n/a</td><td colspan="3" rowspan="3">Amid the declining trend of daily new confirmed cases of COVID-19 since the beginning of May, the state of emergency was lifted for 39 prefectures out of a total of 47 prefectures on May 14 and for Osaka, Kyoto, and Hyogo on May 21. On May 25, the state of emergency was lifted for all prefectures, earlier than the previous May 31 expiry date. Restrictions on inter-prefectural travel were lifted on June 19. Following the recent rise in new infections, Tokyo raised the COVID-19 alert level to the highest on July 15. Amid that backdrop, it has requested residents to refrain from traveling outside Tokyo and karaoke venues and establishments serving alcohol to close by 10 p.m., until the end of August. As new infections continued to trend down, Tokyo lowered the alert level by one notch from the highest level on September 10 and would lift a measure that shortened hours for restaurants and karaoke from September 16.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>254.13</td></tr>
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<tr><th></th><th>Estimated impact</th><th>COVID-19 infection</th><th colspan="6">Containment measures</th></tr>
<tr><th rowspan="2">G20 members</th><th rowspan="2">2020 GDP growth, WEO October 2021</th><th rowspan="2">Thousands cases/1000 persons</th><th colspan="3">Stringency index</th><th rowspan="2">Fiscal policy</th><th rowspan="2">Monetary and macro-financial policies</th><th rowspan="2">Exchange rate and BOP measures</th></tr>
<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="7">South Korea</td><td>-0.85%</td><td>461.47</td><td>57.41</td><td>82</td><td>29</td>
<td rowspan="7">Overall fiscal measures
Overall a total of over 13.8% of GDP support measures, including liquidity provisions and credit guarantees. On September 22, the National Assembly passed the 4th supplementary budget adding an additional KRW 7.8 trillion.

Health system measures
3 supplementary budgets focusing on:
• on epidemic prevention and treatment,
• support for medical institutions and quarantined households,
• expanding diagnostic and treatment facilities,
• promoting treatment and vaccine development as well a the test-trace-treatment to global standard level.
Income support measures for individuals and households
Pay relief checks to all households up to KRW 1 million (USD 820) per household.
Some local governments introduced similar cash support programmes.

Tax and contribution policy changes
Tax measures to stimulate demand and assist domestic businesses:
• Introduction of temporary special tax reduction for SMEs located in corona-related special disaster areas until the end of 2020; small businesses granted up to a 9-month extension for filing of the tax return, and up to 1 year extension for filing and paying local taxes,
• VAT payable by small businesses reduced until the end of 2020; VAT exemption threshold raised temporarily to end 2020.
• Social security contribution relief through three-month payment deferrals and 30 % contribution rate deductions for small business and low-income households.

Public sector subsidies to businesses
Establishment of a Key Industry Relief Fund guaranteed by the government to provide liquidity and purchase corporate debt and equity for the country's seven backbone industries(KRW 40 trillion). Large corporate recipients must retain at least 90% of their employees for six months and some conditions are imposed on management, such as a ban on dividend payments and stock buybacks.

Public sector loans or capital injections
Creation of a bond market stabilisation fund and of a stock market stabilisation fund. Rolling over debt of SMEs and self-employed people to financial institutions. Loans and guarantees for small businesses, indirect support of wage and rent for small merchants.</td>
<td rowspan="7">Policy rate
Base rate lowered by a cumulative 75 basis points, from 1.25% to 0.5%.

Unconventional Monetary measures
Unlimited amounts available through open market operations (OMOs); expansion of the list of eligible OMO participants to include selected non-bank financial institutions; expansion of eligible OMO collateral.
Purchase of Korean Treasury Bonds.
To augment available funding for SMEs, the BOK increased the ceiling of the Bank Intermediated Lending Support Facility (about 0.5% of GDP) and lowered the interest rate to 0.25 percent (from 0.5-0.75 percent).
Expansion of BOK repo operations to non-banks, creation of a BOK lending program to non-banks with corporate bonds as collateral.

Regulatory/Macro prudential policies
Easing collateral requirements for net settlements in the BOK payments system.
Temporary prohibition on stock short-selling in the equity markets.
Temporary easing of rules on share buybacks, loan-to-deposit ratios for banks and other financial institutions and the domestic currency liquidity coverage ratio for banks.</td>
<td rowspan="7">The BOK opened a bilateral swap line with the U.S. Federal Reserve (US$60 bn).
Cap on foreign exchange forward positions increased to 50 percent of capital for domestic banks (previously 40 percent) and 250 percent for foreign-owned banks (from 200 percent).
Temporary suspension of the 0.1% tax on short-term non-deposit foreign exchange liabilities of financial institutions.
Temporary reduction in the minimum foreign exchange liquidity coverage ratio for banks to 70 percent (from 80 percent).</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>3.94%</td><td>8.00</td><td colspan="3">The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-3.24</td><td rowspan="3">n/a</td><td colspan="3" rowspan="3">No lockdown has been imposed on any city or region. Instead, the government urged citizens to comply with distance measures and encouraged employees to work from home. On 23 February, the government designated Daegu and the neighbouring region as "special management zone" and on 15 March, the government designated those regions as "special disaster zones" to allow the release of subsidies. On 22 March, the authorities started the strong distancing campaign for four weeks (e.g. staying at home and avoiding mass congregations). On 20 April, the government started to phase out some stringent physical distancing measures while the basic distancing campaign was extended to 5 May. On 6 May, Korea eased distancing measures and switched to 'everyday life quarantine'. On 16 August, the authorities raised the Level Two of distancing guidelines in the greater Seoul area since the number of new cases increased sharply. On 22 August it placed the Level Two in the three-tier system around the country as a pre-emptive measure. On 30 August, the government raised the Level to 'strengthened level 2', so called, 'Level 2.5' until 13 September. On 13 September, the government eased the distancing regulation allowing eateries, cafes and other facilities to operate normally under stricter quarantine measures.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>47.88</td></tr>
</table>

G20 members	Estimated impact	COVID-19 infection	Containment measures					
	2020 GDP growth, WEO October 2021	Thousands cases/1000 persons	Stringency index Value on 30/09/2020	Value at peak	Days at peak	Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
Mexico	-8.31%	5849.15	73.61	82	104	**Overall fiscal measures** Above-the-line fiscal measures amount to 0.6% of GDP while below-the-line measures also amount to around 0.5 percent of GDP. **Health system measures** Additional health spending amounts to 0.2 percent of GDP, recruitment of 43000 additional health personnel. The Health Institute for Wellbeing (Instituto de Salud para el Bienestar/INSABI) authorised MXN 4.5 billion (USD 180 million) to buy medical devices, medicine and health equipment. Hospital conversion including the use of the military health system, as well as the infrastructure for natural disasters or other catastrophic events. **Income support measures for individuals and households** The elderly and the disabled have received, in advance, two bimonthly payments of their universal pension. Subnational governments put in place financial support to self-employed, rural workers, family businesses and vulnerable groups. **Tax and contribution policy changes** Extension of the deadline to file the personal income tax declaration. Increase in residential electric consumption not to be reclassified to higher tariffs. **Public sector subsidies to businesses** None at federal level. Some subnational governments took different actions to support SMEs in the formal and informal sectors, such as discounts on payroll taxes and credit lines for payment of payrolls or supply merchandise. **Public sector loans or capital injections** Below-the-line measures amount to around 0.7 percent of GDP in loans: • lending programs for the self-employed and SMEs that maintain employees on payroll provided by the Ministry of Economy and the Mexican Social Security Institute (IMSS); • development banks to provide loans, particularly to SMEs.	**Policy rate** The central bank cut rates by 250 basis points since the pandemic break, from 7.00% to 4.5%. **Unconventional Monetary measures** Total measures to support the functioning of the financial system amount to 3.3 percent of 2019 GDP. Increased liquidity (sterilised daily) during trading hours to facilitate the optimal functioning of financial markets and payment systems. Extended eligible securities for the Ordinary Additional Liquidity Facility (FLAO), foreign exchange hedging programme operations, and USD credit operations; extended access to FLAO for development banks. Government securities term repurchase window, to repurchase government securities at longer terms than those of regular open market operations. Temporary securities swap window where eligible institutions may deliver debt securities to Banco de México in exchange for government securities. Corporate Securities Repurchase Facility (FRTC) to provide liquidity to short-term corporate securities and long-term corporate debt that have observed lower liquidity and impaired trading conditions in the secondary market. Financing facility opened for commercial and development banks to channel resources to SMEs and individuals affected by the pandemic. Swap of LT government securities (10 years and longer) for others with maturities up to 3 years. **Regulatory/Macro prudential policies** The National Commission of Banking and Securities (CNBV) published temporary accounting criteria for banks and credit unions e to facilitate the maintenance of credit lines.	The exchange rate has been allowed to adjust flexibly, while supporting US$ liquidity by drawing on the $60 billion swap line with the Fed). The non-deliverable forward hedging program was extended by $10 billion to $30 billion. Two NDF auction were conducted, offering $2 billion each (allocated $2 billion total, 0.2 percent of 2019 GDP). A new tool was added, permitting the central bank to intervene in offshore non-deliverable forwards markets in case intervention is warranted with foreign intermediaries.
	Unemployment rate 2020, WEO October 2021	Thousands deaths /1000 persons	Starting of closure measures					
	4.42%	611.43	The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.					
	2020 Public deficit (% GDP), WEO October 2021	Excess death rate	Reopening of the economy					
	-5.80	n/a	The list of permitted activities has been gradually expanded over the past weeks and the nation-wide lockdown expired on May 4. On May 14, the government announced plans to begin the normalisation of economic activities, including a green-yellow-orange-red color system for states to represent the extent of activities allowed (e.g. states with most active cases are red and would remain in a forced quarantine), the resumption of school and labor activities in municipalities free of infection, and the addition of construction, mining, and transport equipment manufacturing as essential activities. For the weeks of August 31- September 13, one state is in the 'red' category with maximal restrictions, while 21 are in the orange category, and 10 are in the yellow category.					
	2020 Public debt (% GDP), WEO October 2021							
	61.03							

	Estimated impact	COVID-19 infection	Containment measures					
G20 members	2020 GDP growth, WEO October 2021	Thousands cases/1000 persons	Stringency index			Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
			Value on 30/09/2020	Value at peak	Days at peak			
Russia	-2.95%	8081.70	40.74	87	63	**Overall fiscal measures** The total cost of the fiscal package is currently estimated at 3.4% of GDP, with 2.4% in-budget and 1.0% off-budget measures. **Health system measures** Expansion of treatment facilities and acquisition of special relevant equipment. Additional pay and increased insurance guarantees for frontline medical staff. Zero import duties on pharmaceuticals, medical supplies and equipment. **Income support measures for individuals and households** Sickness benefit increased to the level of the minimum wage and coverage extended to quarantined or self-isolating individuals; unemployment benefits set at the maximum level through June. Automatic extension of social benefits and entitlements over the next six months. Child benefit for each child in the family. Simplified/expedited procedures for payment of "maternal capital" and other benefits to families with children. **Tax and contribution policy changes** Deferral of tax payments to firms in the most affected sectors; deferrals on social contributions for SMEs in affected sectors for 6 months; tax holiday on all taxes (excluding VAT) and social contributions for Q2 for SMEs, sole proprietors, and NGOs providing social services. Social contributions by SMEs on wages in excess of the minimum wage permanently reduced from 30 to 15 percent. **Public sector subsidies to businesses** Budget grants for SMEs in affected industries to cover salaries at the rate of one minimum salary per employee for two months plus subsidised and forgivable loans for all enterprises in affected industries to pay minimum wages for 6 months. No insolvency/bankruptcy procedures for 6 months for the most affected sectors. **Public sector loans or capital injections** Interest rate subsidies for SMEs and systemically important enterprises. Loan guarantees can be provided to secure firms' loan agreements	**Policy rate** Policy rate cut since February by 175 bps from 6% to 4.25%. Interest rate on CBR loans aimed at supporting lending to SMEs reduced from 4.0 to 3.5%. **Unconventional Monetary measures** The CBR has temporarily introduced a long-term refinancing instrument (one month and one-year repos). New RUB 500bn facility for SME lending. Another RUB 50 billion to be allocated for similar purposes to borrowers who do not have SME status. From July 27 , the interest rate on CBR loans aimed at supporting lending to SMEs, to support and maintain employment, will be reduced from 2.5 to 2.25 percent. **Regulatory/Macro prudential policies** Banks may value securities at their price at March 1. FX operations can also be valued at the exchange rate of March 1, except for open forex positions. The Deposit Insurance Fund contribution will be reduced from 0.15 percent to 0.1 percent through end-2020. Bank eased liquidity regulations for systemically important credit institutions. Forbearance as regards provisioning for restructured corporate and SME loans will apply to all sectors, not only those affected by COVID. On August 10, the CBR extended some regulatory forbearance beyond September 30, through December 31, 2020 and encouraged banks to further support affected borrowers. Additionally, the CBR reduced risk buffers for unsecured loans to be issued since September 1, 2020, and cancels risk buffers for consumer loans issued by August 31, 2019.	Selling FX reserves from the National Welfare Fund started on March 10. Increased limit on FX swap operations. Measures taken in the field of AML/CFT and currency control.
	Unemployment rate 2020, WEO October 2021	Thousands deaths /1000 persons	Starting of closure measures					
	5.78%	142.18	The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.					
	2020 Public deficit (% GDP), WEO October 2021	Excess death rate	Reopening of the economy					
	-5.29	+38% (Moscow)	The list of permitted activities has been gradually expanded over the past weeks and the nation-wide lockdown expired on May 4. The federal government has announced a three-stage reopening plan but it is up to regional governors to decide when and how to proceed. During the first stage of reopening, people will be allowed to walk and exercise outdoors, and small shops and service-sector establishments will reopen. The second stage will allow schools and larger shops and service-sector businesses to open. In the third stage, parks, hotels, restaurants, and all shops will reopen. Criteria for lifting restrictions in specific regions include infection rates, the availability of hospital beds, and testing capacity. As of September 9, 12 regions were in the first stage, 38 in the second and 35 in the third, with less than 1.5 percent of regional economies (780 thousand people) still under lockdown restrictions. The reopening is conditional on safety guidelines, including social distancing and disinfection. Passenger flow at airports increased almost by 2.4 times m/m in July. Film theatres reopened in half of the regions, but they have restored only 5 percent of their last-year ticket sales. Over 30 percent of fitness clubs did not reopen after restrictions were lifted. Retail trade rebounded close to pre-crisis levels – with regional variations , - but large shopping malls are struggling. The authorities are designing a contingency plan for retailers against a potential second wave. Industrial enterprises and construction sites are back in business nationwide. The government has prepared a RUB 5 trillion National Economic Recovery Plan to navigate the economy through reopening and on to a steady growth path.					
	2020 Public debt (% GDP), WEO October 2021							
	19.28							

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<tr><th></th><th>Estimated impact</th><th>COVID-19 infection</th><th colspan="5">Containment measures</th></tr>
<tr><th rowspan="2">G20 members</th><th rowspan="2">2020 GDP growth, WEO October 2021</th><th rowspan="2">Thousands cases/1000 persons</th><th colspan="3">Stringency index</th><th rowspan="2">Fiscal policy</th><th rowspan="2">Monetary and macro-financial policies</th><th rowspan="2">Exchange rate and BOP measures</th></tr>
<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="9">Saudi Arabia</td><td>-4.11%</td><td>9916.53</td><td>57.41</td><td>94</td><td>69</td><td rowspan="9">Overall fiscal measures
Overall fiscal stimulus amounting to 3.1% of GDP.

Health system measures
Budget reallocation to the Ministry of Health for a total of SAR 47 bn spending in response to COVID19 pandemic. The authorities announced spending cuts in non-priority areas amounting to 2% of GDP to accommodate some of these new expenditures.

Income support measures for individuals and households
Expat fees are cancelled for three months (foreigners represent almost a third of the population and a much higher share of the labour force).

Tax and contribution policy changes
Saudi business owners will be allowed to postpone VAT, excise tax, income tax, government service fees and municipal fees payments for three months. Also the collection of customs duties on imports is postponed for three months.
Removal of cost-of-living allowances for public sector workers effective June.
Increasing the VAT from 5% to 15% as of July.

Public sector subsidies to businesses
Wage benefits to employers who keep their workers provided by the unemployment insurance scheme SANED (SAR 9 bn). Temporary electricity subsidies to certain sectors.
Coverage of fees for private sector stores and entities for point-of-sale and e-commerce transactions for 3 months.
On June 16, The Saudi Industrial Development Fund (SIDF) announced initiatives totaling SAR 3.7 billion to support impacted private sector industrial enterprises.
On July 14, the Ministry of Finance launched a SAR 670 million program to help businesses defer loan payments due this year.

Public sector loans or capital injections
Off budget support provided by the National Development funds for loan rescheduling/restructuring SMEs (SAR 13bn) and support for private sector employment programs (SAR 5bn).</td><td rowspan="9">Policy rate
The Saudi Arabian Monetary Authority (SAMA) reduced its policy rates twice, lowering its reverse repo and repo rates by a combined 1.25 pp to 0.5% and 1% respectively.

Unconventional Monetary measures
A SAR 50 billion (2 percent of GDP) package to support the private sector, particularly SMEs, by providing funding to banks to allow them to defer payments on existing loans and increase lending to businesses.
On June 1st, SAMA announced the injection of SAR 50 billion into the banking sector through deposit placements to support banking liquidity and private sector credit. On September 1, SAMA extended the loan deferred payments program for three months until December 14, 2020.

Regulatory/Macro prudential policies
N/a.</td><td rowspan="9">No interventions.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>7.40%</td><td>140.62</td><td colspan="3">The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-10.56</td><td rowspan="3">n/a</td><td colspan="3" rowspan="3">On April 26, the authorities ordered a partial lifting of the curfew in all regions, except in Makkah and previously isolated neighborhoods. This was interrupted by a 5-day nationwide full lockdown and curfew during the Eid holidays from May 23 to May 27. On May 26, the authorities announced a 3-phase plan for removing coronavirus-related restrictions. During the first phase which extended from May 28-30, movement within and between all cities (except Makkah) in private cars as well as activities in retail and wholesale shops and malls were allowed. During the second phase which extended from May 31 to June 20, private sector employees were allowed to go back to offices with minimal staff and strict observance of coronavirus precautionary measures, domestic flights, railways and other public transport were allowed to resume, curfew hours were reduced to 8:00pm to 6:00 am in all regions except Makkah, prayers in mosques, including Friday prayer, were allowed to resume (except for mosques in Makkah), and restaurants and cafes allowed to reopen, although the ban on social gatherings of more than 50 people is maintained. On June 21, the all clear phase started. Curfew restrictions were completely lifted and domestic travel started to return to normal throughout the country, while bans on international travel and religious pilgrimages have been slowly lifted. On August 30, public sector employees returned to work.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>32.54</td></tr>
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<tr><th></th><th>Estimated impact</th><th>COVID-19 infection</th><th colspan="6">Containment measures</th></tr>
<tr><th rowspan="2">G20 members</th><th rowspan="2">2020 GDP growth, WEO October 2021</th><th rowspan="2">Thousands cases/1000 persons</th><th colspan="3">Stringency index</th><th rowspan="2">Fiscal policy</th><th rowspan="2">Monetary and macro-financial policies</th><th rowspan="2">Exchange rate and BOP measures</th></tr>
<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="8">South Africa</td><td>-6.43%</td><td>11636.19</td><td>41.67</td><td>88</td><td>111</td><td rowspan="8">Overall fiscal measures
Overall fiscal stimulus amounting to 9.6% of GDP to support households and businesses.

Health system measures
R20 billion directed to buy medical equipment and pay staff for health facilities. Additional funding of R20 billion made available to municipalities for the provision of emergency water supply, increased sanitisation of public transport and facilities, and providing food and shelter for the homeless. R446 million allocated through disaster funds mainly for personal protective equipment for health workers.

Income support measures for individuals and households
R50 billion mobilised towards increased child support grant beneficiaries and general beneficiaries. Food distribution to needy household.
Increased unemployment insurance through special Covid-19 Social Relief of Distress Grant. Wage subsidy for each employee that earns less than R600 per month (R15 billion). Special dispensation for companies that are in distress, allowing employees to receive wage payment through the Temporary Employee Relief Scheme. Employees falling ill through exposure at their workplace to be paid through the Compensation Fund.

Tax and contribution policy changes
Tax subsidy of up to R500 per month for the next four months for those private sector employees earning below R6500 to be provided under the Employment Tax Incentive. Four-month holiday for skills development levy contributions (1% of total salaries) to assist all businesses with cash flow (around R6 billion).
Fast-tracking of VAT refunds. Postponing the implementation of some budget 2020 measures.

Public sector subsidies to businesses
R40 billion set aside for income support payments for workers whose employers are not able to pay wages. Additional R100 billion to be set aside for protection and creation of jobs.
An additional amount of R2 billion to be made available to assist SMEs and other small businesses. Over R100 million provided in the form of loans, grants and debt restructuring to SMEs and other informal businesses.

Public sector loans or capital injections
R3bn for industrial funding to address the situation of vulnerable firms and to fast-track financing for companies critical to the efforts to fight the virus and its economic impact.</td><td rowspan="8">Policy rate
The central bank (SARB) reduced the policy rate by cumulative 275 bps from 6.25 percent to 3.5 percent.

Unconventional Monetary measures
Increase in the number of repo auctions to two to provide intraday liquidity support to clearing banks at the policy rate.
Reduction of the upper and lower limits of the standing facility to lend at repo-rate and borrow at repo-rate less 200 bps.
Raising of the size of the main weekly refinancing operations as needed.
Purchase government securities in the secondary market across the entire yield curve and extend the main refinancing instrument maturities from 3 to 12 months.
As of August 19, noting a normalisation of liquidity conditions, the SARB reverted to standard standing facility borrowing rates (repo rate less 100 basis points).

Regulatory/Macro prudential policies
Prudential authority issued a proposal on March 26 effective from April 1st, which includes dropping minimum capital requirements and compulsory reserve funds for lenders, reducing the liquidity coverage ratio to 80% from 100% and relaxing accounting standards when determining potential losses.
On August 3, the SARB announced that the easing of macro-prudential policies would be extended until further notice.</td><td rowspan="8">Following a request from the government, on July 27 the IMF approved emergency assistance under the Rapid Financing Instrument equivalent to US$4.3 billion.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>29.16%</td><td>288.36</td><td colspan="3">The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-14.04</td><td rowspan="4">+4%</td><td colspan="3" rowspan="4">On May 1, 2020, a phased lifting of the lockdown began, allowing a few sectors to resume operation and others only partially. On May 13, a further relaxation of the lockdown was announced effective June 1. On May 24, it was specified that the June 1 relaxation would be broader than previously announced. Most economic activities reopened under strict health and social distancing practices except for high risk ones. Remote work has always been encouraged where possible. Starting June 8, schools started to reopen and on June 17, restrictions on sit-down restaurants, hotels, conference centers, casinos, non-contact sports, and personal care services were relaxed under strict adherence to health protocols. On July 12, in response to a growing number of Covid-19 cases, a curfew and an alcohol ban were reintroduced and the wearing of facemasks in public was made mandatory. The national state of disaster was extended to August 15. On July 23, it was announced that, starting on July 27, public schools would be closed for one month with minor exceptions. On August 15, the national state of disaster was extended to September 15 and on September 11 extended once again to October 31. On August 17, following a drop in the number of daily cases, the sale of alcohol was allowed to resume subject to certain restrictions while restrictions on inter-provincial travel and the operation of accommodation, hospitality venues, beaches, restaurants, bars, and taverns were relaxed subject to strict adherence to health protocols and social distancing. On September 21, an additional relaxation of restrictions was announced.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>69.45</td></tr>
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<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="7">Turkey</td><td>-1.79%</td><td>3855.07</td><td>60.19</td><td>78</td><td>66</td><td rowspan="7">Overall fiscal measures
Total fiscal support is worth an estimated 13.8% of GDP (TL573.7 billion).
Health system measures
Construction of two specialised COVID-19 hospitals. USD 100 million 10-year loan agreement under World Bank's COVID-19 Fast-Track Facility finalised to help finance the extension of the dedicated health infrastructure. Firms producing disinfectants, medical masks and other protection material for health workers received a grant of TL 6 million by firm.
Income support measures for individuals and households
Minimum monthly pensions raised and disbursed early. TL 2.1 billion (USD 308 million) earmarked for families in need, more than 2 million families to receive TL 1000 (USD 154).
Easing of the access conditions to the Short-Time Working Scheme. Compensatory working time increased from 2 months to 4 months. A fix allocation of TL 1170 (USD 170) to be allocated to the workers covered by the Unemployment Insurance Fund.

Tax and contribution policy changes
April, May and June VAT and social security contributions postponed for six months in relevant sectors (TL 54 billion). VAT rate in domestic air transportation reduced from 18% to 1% for April, May and June. VAT on several services sectors affected severely by the pandemic were reduced till the end of 2020. On August 30, the special consumption tax rate on mid-range and luxury passenger cars was raised and the price bracket for cheaper cars was levelled up.
Public sector subsidies to businesses
Turkish Airlines to be supported "as needed". All rents due by businesses and municipalities on government-owned real estate postponed. Agricultural cooperatives' debt payments to public entities postponed for a year.
Public sector loans or capital injections
The Central Bank introduced a new programme of "Advance Loans Against Investment Commitment". Loans will be extended for 10 years, at an interest rate 150 basis points below the CBRT policy rate, and under a cap of TL 400 million per firm.
The three public banks will offer all firms, conditional on their preserving their current employment level, working capital loans under a TL 25000 limit, at 36 months maturity, 6 month grace period and subsidised 7.5% interest rate.
Exporters to be given stock financing assistance to maintain capacity during the slowdown.
The Credit Guarantee Fund increased its limits for SME loans from USD 3.8 to 7.7 bn. The Union of Chambers and Commodity Exchanges announced that it will provide financial support to SMEs of between 50 billion and 100 billion TL.</td><td rowspan="7">Policy rate
The CBRT lowered the policy rate from January 2020 to May reaching a low of 8.25% raised to 10.25% in September.

Unconventional Monetary measures
Liquidity limits of Primary Dealers in Open Market Operations (OMOs) increased from 5% to 10%, to facilitate its purchases of Government Domestic Debt Securities (GDDS) from Primary Dealers.
Banks offered additional liquidity facilities. Extension of securities accepted as collateral in transactions with banks, increase in the limits of liquidity facilities supporting uninterrupted credit flow to the corporate sector.
Foreign exchange reserve requirement ratios reduced by 500 basis for banks meeting CBRT's real credit growth conditions.
Extension of available rediscount credits for exporters (with a 70% allocation to SMEs in export credits intermediated by banks).
The CBRT reduced the remuneration rate by 1.0 pp to 5.0 percent.

Regulatory/Macro prudential policies
Reserve requirements on foreign currency deposits reduced by 500 bps for banks meeting lending growth targets.
On July 10, the BRSA loosened the macro-prudential restrictions on credit card spending by low-income households and those households in arrears for credit card repayments. T8he CBRT raised the reserve requirement ratios for all types and maturities of foreign exchange liabilities by 300bps for all banks.
The BRSA reduced the minimum asset ratio by 5pps to 95% for deposit banks and to 75% for participation banks.</td><td rowspan="7">Withholding tax on returns from FX mutual funds raised to 15 percent from 10 percent for real persons and zero for legal persons. The Capital Markets Board (SPK) imposed some limitations on the portfolio composition of FX mutual funds.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>13.15%</td><td>98.78</td><td colspan="3">The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2020</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-7.88</td><td rowspan="3">+30% (Instanbul)</td><td colspan="3" rowspan="3">On May 4, following reported improvements in Covid-19 statistics, the government announced a phased approach to lifting lockdown measures from May to July. In the first phase, certain retail shops opened from May 11. In late May, the authorities announced their intention to lift most of the COVID-related restrictions, effective from June 1, including: removal of travel restrictions between 15 major cities, reopening of restaurants, cafes, sporting facilities and government institutions, and the resumption of domestic flights. On June 10, a new reopening measures were announced, including the phased resumption of international flights; curfews on people aged below 18 and over 65 were eased; and opening times for restaurants and similar businesses were extended. In mid-June, the authorities announced targeted measures, including: the mandatory use of face masks in public areas in Istanbul, Ankara and Bursa, and the reinstatement of limited weekend curfews (related especially to nationwide high school and higher education entrance exams). On July 31, a Presidential Decree extended, again, the nationwide ban on layoffs by one month when the current ban expires on August 17. On August 26, a Presidential Decree allowed state institutions to introduce flexible working modalities. On September 4, a nationwide ban on layoffs was extended by two months when the current ban expires on September 17. On September 8, the wearing of masks was mandated in all public areas to contain an uptick in coronavirus cases. On September 9, the government revised plans for a return to face-to-face education with only pre-school and first-year pupils expected to return to in-person classes on September 21.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>39.77</td></tr>
</table>

G20 members	Estimated impact	COVID-19 infection	Containment measures					
	2020 GDP growth, WEO October 2021	Thousands cases/1000 persons	Stringency index			Fiscal policy	Monetary and macro-financial policies	Exchange rate and BOP measures
			Value on 30/09/2020	Value at peak	Days at peak			
United Kingdom	-9.85%	6709.11	63.89	80	95	**Overall fiscal measures** The UK government has announced an overall package worth 25.7% of GDP. This includes over 16.6% of GDP of state loans and guarantees, including for struggling businesses through the Coronavirus Corporate Financing Facility and the Coronavirus Business Interruption Loan Scheme, and 9.2% of GDP of budgetary spending. **Health system measures** GBP 48.5 billion for the National Health Service (NHS) and other public services to tackle the virus. **Income support measures for individuals and households** Additional GBP 8 billion for welfare support including Universal Credit (UC) for self-employed, suspension of the minimum income floor of UC, and increase in the UC allowance by GBP 1000 for the next twelve months. The Coronavirus Job Retention Scheme where the government will pay 0 percent of the earnings of self-employed workers and furloughed employees (to a maximum of £2,500 per employee per month) initially for the period March-May. For furloughed employees, the scheme has been extended until end-October. Government coverage falls to 70 percent of wages in September (up to £2,187) and 60 percent in October (up to £1,875) with employers required to contribute the difference to 80 percent of wages (up to £2,500). The scheme for the self-employed has been extended for three more months but at a reduced level. **Tax and contribution policy changes** VAT payments of around GBP 30 billion for the second quarter of 2020 are deferred until 2021, temporary reductions of VAT for affected industries. **Public sector subsidies to businesses** GBP 30 billion for business support including: GBP 15 billion small business grant scheme with cash grants for business with a property used for retail, hospitality or leisure; Suspension of business rates for affected businesses (estimated to cost GBP 13 billion); Refund of the cost of statutory sick leave up to 2 weeks for small businesses with less than 250 employees at a cost of GBP 1 billion. **Public sector loans or capital injections** GBP 750 million grants and loans for business R&D through Innovate UK. New GBP 500 million Future Fund provides between 125k and 5m for UK based-business as long as the cash is matched by private investors. GBP 330 billion (14.9% of GDP) of temporary state loans and guarantee scheme for businesses. This includes the Coronavirus Corporate Financing Facility and the Coronavirus Business Interruption Loan Scheme (CBILS).	**Policy rate** Policy rate reduction by 65 bps from 0.75% to 0.1%. **Unconventional Monetary measures** Direct central bank financing of government debt through lifting of the GBP 370 million cap on the government's Ways and Means (W&M) facility (government's overdraft account with the BoE) to directly finance additional government spending. Increase of BoE's holdings of UK government and corporate bonds by GBP 300 billion to a total of GBP 745 billion, financed by central bank reserves. Launched the joint HM Treasury—Bank of England Covid Corporate Financing Facility which, together with the Coronavirus Business Interruption Schemes, makes £330bn of loans and guarantees available to businesses (15 percent of GDP). The BoE will purchase commercial papers of firms of up to one-year maturity, with interest rate set with a fixed spread to the sterling overnight index swap (OIS) rate. The Term Funding scheme for Small and Medium-sized Enterprises (TFSME) provided funding for banks at interest rates close to the Bank Rate of 0.1%, with lending to SMEs incentivised (more than 5% of GDP). **Regulatory/Macro prudential policies** Easing of capital requirements given the countercyclical capital buffer rate was cut to 0% and this is expected to support the ability of banks to supply additional credit of around GBP 190 billion.	No intervention.
	Unemployment rate 2020, WEO October 2021	Thousands deaths /1000 persons	Starting of closure measures					
	4.53%	632.66	The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.					
	2020 Public deficit (% GDP), WEO October 2021	Excess death rate	Reopening of the economy					
	-16.46	+45%	On May 10, the government set out a roadmap to ease the lockdown in England (Scotland, Wales and Northern Ireland have separate rules). In the first step, May 13-31, people who could were requested to work from home, while those working in the manufacturing and construction sectors were encouraged to go back to work minimising the use of public transportation. In step 2, starting on June 1, some schools as well as outdoor markets and car showrooms were allowed to reopen, while all other non-essential retail reopened on June 15. In step 3, starting on July 4, the hospitality and personal care industries, as well as public places, reopened while enforcing social distancing. Gradual opening steps continued since then. All educational facilities are opening in September. Face covering requirements are in effect since July 24. New guidance in effect as of September 14 restricts meetings to socialise with people outside the household to groups of up to 6. Additional guidance was published on September 22 entailing: the obligation to wear masks in taxis and hospitality and retail venues; restricting the number of people in social gatherings and support groups to 15; requesting people to work from home if they can; mandating venues in the hospitality and leisure sectors to close between 10 pm and 5 am. The government has published "COVID-19 Secure" guidelines for employers to help protect their workforce and customers from coronavirus that must be met as a condition for reopening. Due to increased cases, localised restrictions have been reinstated in certain areas.					
	2020 Public debt (% GDP), WEO October 2021							
	104.47							

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<tr><th>Value on 30/09/2020</th><th>Value at peak</th><th>Days at peak</th></tr>
<tr><td rowspan="9">United States</td><td>-3.41%</td><td>22011.21</td><td>62.50</td><td>73</td><td>177</td>
<td rowspan="9">Overall fiscal measures
Total support estimated at 14.3% of GDP, disbursed also through (a) the Paycheck Protection Program and Health Care Enhancement Act (USD 483 billion or 2% of GDP) and (b) the Coronavirus Aid, Relief and Economy Security Act ("CARES Act", worth USD 2 trillion worth around 9% of GDP) including:
• USD 150 billion in transfers to state and local governments,
• USD 49.9 billion for international assistance,
• USD 454 billion to backstop possible losses in lending facilities set up by the Fed with which the central bank could leverage into USD 4 trillion in lending to businesses.
On August 8, President Trump issued executive orders mostly to address the expirations of certain Coronavirus reliefs provided by previous legislations. These included:
• Using $44 billion from the Disaster Relief Fund to provide extra unemployment benefits;
• Continuing student loan payment relief;
• Deferring collections of employee social security payroll taxes;
• Identifying options to help renters and homeowners avoid evictions and foreclosures.

Health system measures
Overall USD 304 bn in additional including:
• USD 175 billion for hospitals,
• USD 25 billion for expanding virus testing,
• USD 8.3 billion Coronavirus Preparedness and Response Supplemental Appropriations Act for treatments, drugs and public heath measures,
• USD 192 billion Families First Coronavirus Response Act including CDC funding.

Income support measures for individuals and households
USD 293 billion to provide one-time tax rebates to individuals, USD 268 billion to expand unemployment benefits, USD 25 billion to provide a food safety net for the most vulnerable.

Public sector subsidies to businesses
The legislation includes USD 321 billion for additional forgivable Small Business Administration loans and guarantees to help small businesses that retain workers. USD 62 billion for the Small Business Administration to provide grants and loans to assist small businesses.

Public sector loans or capital injections
USD 510 billion to prevent corporate bankruptcy by providing loans, guarantees, and backstopping Federal Reserve 13(3) program. USD 349 billion in forgivable Small Business Administration loans and guarantees to help small businesses that retain workers.</td>
<td rowspan="9">Policy rate
Federal funds rate lowered by 150bp in March to 0-0.25bp.
Unconventional Monetary measures
The Federal Reserve resumed large scale asset purchases of treasury securities and agency mortgage backed securities; expanded overnight and term repos; lowered cost of discount window lending.
The Federal Reserve also introduced facilities to support the flow of credit:
• Commercial Paper Funding Facility to facilitate the issuance of commercial paper by companies and municipal issuers;
• Primary Dealer Credit Facility to provide financing to the Fed's 24 primary dealers;
• Money Market Mutual Fund Liquidity Facility (MMLF) to provide loans to depository institutions to purchase assets from prime money market funds;
• Primary Market Corporate Credit Facility to purchase new bonds and loans from companies;
• Secondary Market Corporate Credit Facility to provide liquidity for outstanding corporate bonds;
• Term Asset-Backed Securities Loan Facility to enable the issuance of securities backed by student loans, auto loans, credit-card loans, and loans guaranteed by the Small Business Administration;
• Paycheck Protection Program Liquidity Facility (PPPLF) to provide liquidity to financial institutions that originate loans under the Small Business Administration's Paycheck Protection Program (PPP);
• Main Street Lending Program to purchase new or expanded loans to small and mid-sized businesses;
• Municipal Liquidity Facility to purchases short term notes directly from state and eligible local governments.
Regulatory/Macro prudential policies
Holdings of U.S. Treasury Securities and deposits at the Federal Reserve Banks could be temporarily excluded from the calculation of the supplementary leverage ratio for holding companies. Other actions include lowering the community bank leverage ratio to 8 percent.</td>
<td rowspan="9">Reduced existing cost of swap lines with major central banks and extended the maturity of FX operations.
Broadened U.S. dollar swap lines to more central banks; offered temporary repo facility for foreign and international monetary authorities.</td></tr>
<tr><th>Unemployment rate 2020, WEO October 2021</th><th>Thousands deaths /1000 persons</th><th colspan="3">Starting of closure measures</th></tr>
<tr><td>8.11%</td><td>630.54</td><td colspan="3">The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.</td></tr>
<tr><th>2020 Public deficit (% GDP), WEO October 2021</th><th>Excess death rate</th><th colspan="3">Reopening of the economy</th></tr>
<tr><td>-18.72</td><td rowspan="5">+23%</td><td colspan="3" rowspan="5">Due to heterogenous developments of the Covid-19 outbreak across states, progress on reopening the economy varied across the country. As of September, restaurants, gyms and/or house of worship remained closed in some states (e.g. California, Arizona), while retail stores and personal-care services have reopened across the country. Schools have reopened in most states with approaches (in-person instruction, virtual or hybrid) varied across states and regions.</td></tr>
<tr><th>2020 Public debt (% GDP), WEO October 2021</th></tr>
<tr><td>133.92</td></tr>
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	Estimated impact	COVID-19 infection	Containment measures					
G20 members	**2020 GDP growth, WEO October 2021**	**Thousands cases/1000 persons**	**Stringency index**			**Fiscal policy**	**Monetary and macro-financial policies**	**Exchange rate and BOP measures**
			Value on 30/09/2020	**Value at peak**	**Days at peak**			
European Union	-5.88%	-	-	-	-	**Overall fiscal measures** National liquidity measures, including schemes approved by the European Commission under temporary flexible EU State Aid rules amounted to about €2.9 trillion. The European Council agreed on the Next Generation EU (NGEU) recovery fund on July 21. It will provide €806.9 billion in total, financed by borrowing at the EU level. The funds are split between grants (€421,1 billion) and loans (€385,8billion) which will be channeled through a special Recovery and Resilience Facility (RRF) and a top-up to existing EU budget programs. European Commission's current fiscal package consists of about €540 billion (4 percent of EU27 GDP) Key measures also come from the EU Budget (about €37 billion and 0.3 percent of 2019 EU27 GDP) The European Commission proposed modifications to its 2020 budget to make €11.5 billion for crisis repair and recovery available already this year. The European Commission also activated the general escape clause in the EU fiscal rules, which suspends the fiscal adjustment requirements for countries that are not at their medium-term objective and allows them to run deficits in excess of 3 percent of GDP. **Health system measures** Allowing the European Stability Mechanism (ESM) to provide Pandemic Crisis Support (based on existing precautionary credit lines) up to 2 percent of 2019 GDP for each euro area country (up to €240 billion in total) to finance health related spending. Establishing the Coronavirus Response Investment Initiative (CRII) and the Coronavirus Response Investment Initiative Plus (CRII+) in the EU budget to support public investment for hospitals, SMEs, labor markets, and stressed regions. Extension of the scope of the EU Solidarity Fund to include a public health crisis, with a view of mobilising it if needed for the hardest-hit EU Member States (up to €800 million is available in 2020. **Income support measures for individuals and households** The EC presented proposals to the Council for decisions to grant financial support of €87.3 billion to 16 Member States under the SURE instrument on August 24 out of €100 possible. **Public sector loans or capital injections** Provision of €25 billion in government guarantees to the European Investment Bank (EIB) to support up to €200 billion to finance to companies, with a focus on SMEs (which augments previously agreed guarantees of €40 billion for the EIB's on-lending activities). Redirecting €1 billion from the EU Budget as a guarantee to the European Investment Fund to incentivise banks to provide liquidity to SMEs.	**Policy rate** Lowering the interest rate applied in targeted longer-term refinancing operations (TLTRO III) during the period from June 2020 to June 2021 (50 basis points below the average rate applied in the Eurosystem's main refinancing operations). **Unconventional Monetary measures** Conducting longer-term refinancing operations (LTROs). Conduct a new series of non-targeted pandemic emergency longer-term refinancing operations (PELTROs). Additional asset purchases of €120 billion until end-2020 under the existing program (APP). Easing collateral standards to give easier access to ECB liquidity, by adjusting the main risk parameters of the collateral framework. Grandfather the eligibility of marketable assets and the issuers of such assets that fulfilled minimum credit quality requirements, as long as the ratings remain at or above BB. Reinforcement of the asset purchase programme (APP): • Addition of a temporary envelope of additional net asset purchases of €120 billion until the end of the year. • Launch of a new temporary asset purchase programme of private and public sector securities (Pandemic Emergency Purchase Programme, PEPP) with an overall envelope of EUR 750 billion until the end of 2020. Envelope for the PEPP increased by EUR 600 billion to a total of EUR 1350 billion; horizon for net purchases under the PEPP extended to the end of June 2021. • Expansion of the range of eligible assets under the corporate sector purchase programme (CSPP) to non-financial commercial paper. On June 25, the ECB set up the Eurosystem repo facility for central banks (EUREP) to provide precautionary euro repo lines to central banks outside the euro area, which complements existing bilateral swap and repo lines. **Regulatory/Macro prudential policies** The ECB Banking Supervision allowed significant institutions to operate temporarily below the Pillar 2 Guidance, the capital conservation buffer, and the liquidity coverage ratio (LCR). Flexibility allowed in the classification requirements and expectations on loss provisioning for non-performing loans (NPLs) that are covered by public guarantees and COVID-19 related public moratoria. The European Commission adopted a banking package that proposes targeted amendments to EU banking rules, including, amongst other measures, a two-year extension of the current transitional arrangements for the IFRS9 implementation in the CRR.	No intervention.
	Unemployment rate 2020, Eurostat	**Thousands deaths /1000 persons**	**Starting of closure measures**					
	7.0%	-	The government has responded with a range of measures to contain the spread of virus through border closures, closure of schools and non-essential businesses, social distancing requirements and a ban on public gatherings.					
	2020 Public deficit (% GDP), WEO October 2021	**Excess death rate**	**Reopening of the economy**					
	-6.97	-	The European Commission presented guidelines for exit strategies and called for a common framework across member states. The criteria include: (i) sustained reduction and stabilisation of new cases, (ii) sufficient health system capacity such as adequate hospital beds, pharmaceutical products, and equipment, and (iii) appropriate monitoring capacity to quickly detect and isolate infected individuals as well as to trace contacts. The Commission recommended Schengen Member States and Schengen Associated States to lift internal border controls by June 15, 2020, extend the temporary restriction on non-essential travel to the EU until 30 June, and set out an approach to progressively lifting the restriction afterwards. As of July 1, residents of certain third countries, which have met a set of criteria, should not be affected by temporary external borders restriction on non-essential travel into the EU.					
	2020 Public debt (% GDP), WEO October 2021							
	91.90							

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