GROUP OF TWENTY

G-20 REPORT ON STRONG, SUSTAINABLE, BALANCED, AND INCLUSIVE GROWTH

2020

Prepared by Staff of the

INTERNATIONAL MONETARY FUND*

*Does not necessarily reflect the views of the IMF Executive Board

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CONTENTS

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ANNEXES

EXECUTIVE SUMMARY

The COVID-19 pandemic has caused great devastation and has dramatically changed the global economic landscape.[1] Since the 2019 assessment of the G-20's progress toward strong, sustainable, balanced, and inclusive growth, the COVID-19 pandemic has spread across the world, leading to loss of lives and a deep recession in 2020. The recovery is likely to be partial and uneven, with some sectors and countries picking up faster than others. While there are tentative signs that the worst is over, uncertainty remains high as infections continue to spread. A sudden tightening of financial conditions—for instance due to adverse news on the disease front—or geopolitical and social tensions could also disrupt growth. Premature withdrawal of policy support would be costly in this environment.

The wounds inflicted by the pandemic are likely leaving deep scars, compounding underlying challenges. The pandemic has been a severe blow to people with low- and medium-skill jobs, many of which are women and youth. Sustained, strong, and inclusive growth is unlikely until the pandemic is stifled with medical solutions. Moreover, while much is still to be learned about the post-pandemic world, the transition could entail a wave of bankruptcies and a reallocation of resources between sectors, with the skills needed for the expanding activities possibly different than those possessed by the jobless. To avoid elevated structural unemployment and a loss in productivity, a reskilling of workers and efficient debt workouts will likely be required. Climate change, in the absence of strong adaptation and mitigation efforts, is likely to continue to disrupt growth, in particular in small disaster-prone economies.

Policymakers must focus on ending the crisis and begin to heal the wounds. The utmost priority is to quickly end the health crisis, support economies and people through it, and set the stage for a recovery that is not only strong and durable, but that benefits all people. This requires tackling the legacies of the crisis and addressing long-standing reform needs.

- *Continue to provide support through the crisis and bolster growth*. Containing the virus requires efforts to ensure widespread testing, contact tracing, social distancing, and use of masks. Monetary and financial-sector policies should remain accommodative and help support financial stability. Fiscal authorities will need to ensure that policy support is not withdrawn prematurely as some discretionary measures—to help households, workers, and firms—expire. It will be critical to identify well-targeted measures that can replace expiring ones and that can be introduced quickly if growth threatens to fall below baseline projections.
- *Ensure a durable recovery*. Public investment in healthcare, education, and physical and digital infrastructure will help promote the recovery. Structural reforms are also needed, not only to address pre-pandemic gaps, such as product market reforms to further competition, but also to enable a positive transformation and limit scarring. Notably, the crisis has revealed the need for greater digitization, especially of government services; and reforms to insolvency regimes and

[1] In support of the G-20, this report discusses the G-20's progress during the past year toward the goal of strong, sustainable, balanced, and inclusive growth and provides policy recommendations to help reach this goal.

debt resolution systems. Strengthening childcare and active labor market policies and reskilling can also help ensure a faster return to full employment. Once the crisis is clearly abated, focus will need also to turn toward putting debt levels on a downward path to ensure longer-term debt sustainability and restore buffers.

- *Enhance access to opportunities.* Decisive actions are crucial to durably reverse the rise in poverty and income inequality. This would require wider social safety nets and expanded access to essential goods and services. Enhancing access for all to health care, high-quality education, financial services, and technology would not only help prevent a crisis-driven rise in inequality from becoming permanent, it would also lift aggregate demand as economies recover.

Getting to strong and durable growth requires collaboration.

- *A global virus must be tackled with collaborative action.* The G-20 policy agenda must include a collaborative global solution to ensure the development, production, and distribution of effective medical treatments and vaccines. The availability of adequate health supplies and medical solutions must be assured in all countries. This not only helps smaller and poorer economies, it would also bring the world back to normalcy more quickly, helping activity also in larger economies. Export restrictions on critical supplies should be lifted without hesitation as they limit the flow of goods at potentially great humanitarian cost.

- *The richest economies must stay committed to continued support for the poorest ones.* As the crisis continues to unfold, the financing needs of developing economies continue to grow. The G-20 has already helped provide valuable debt service relief. But more needs to be done to help governments meet the needs of their populations at this time of crisis, including in the form of concessional financing, debt relief, and grants.

- *Global leaders should undertake a concerted effort to ensure the recovery is green and sustainable.* The upward trajectory of global temperatures and carbon emissions must be put to an end to limit the large human and economic costs that inaction would entail. The world economy cannot afford a setback in addressing climate change as the window for limiting greenhouse gas emissions and global temperature increases to safe levels is rapidly closing. Instead, recovery from the crisis represents an opportunity to promote green investment and jobs—strengthening the economy and starting a transition away from dirty energy.

- *Other pre-pandemic challenges will also need to be tackled.* These relate to international taxation to address base erosion and profit shifting and the digital taxation framework; improving debt transparency; and completing and implementing the international financial regulatory reform agenda.

A SEVERE RECESSION IS LEAVING DEEP SCARS

The global landscape has changed dramatically during the past year. The spread of COVID-19 has led to widespread loss of lives and an economic crisis. The projected recovery is subject to sizable adverse risks, and the losses of human capital, combined with rising poverty and inequality and increasing debt levels, are set to leave deep scars.

1. **Since the *2019 G-20 Report on Strong, Sustainable, Balanced, and Inclusive Growth*, twin health and economic crises have devastated the global economy**. 2020 will forever be remembered as a year of loss, prompted by the COVID-19 pandemic. Essential strict containment measures helped reduce the rates of infection and save lives. However, they also contributed to a sharp contraction of economic activity and the worst global downturn since the Great Depression. Many people have lost their lives or continue to struggle with illness. Scores of people have lost their jobs, pushing millions into poverty and leading to worsening income inequality. Debt levels have soared amid the need for essential health care spending and support for individuals and firms to help protect livelihoods. Moreover, the future remains uncertain, with risks on the downside, not least as the search continues for effective treatments and vaccines that can cover the global population (Figure 1, Annexes I and II). Getting to strong, sustainable, balanced, and inclusive growth is more important than ever, but it is a goal that can only be reached if everyone joins efforts and together puts the health of all people, across the world, as a priority.

Figure 1. Progress Toward Strong, Sustainable, Balanced, and Inclusive Growth

Source: IMF staff estimates.
Note: The assessment is relative to the 2019 assessment as reflected in IMF, 2019, G-20 Report on Strong, Sustainable, Balanced, and Inclusive Growth.

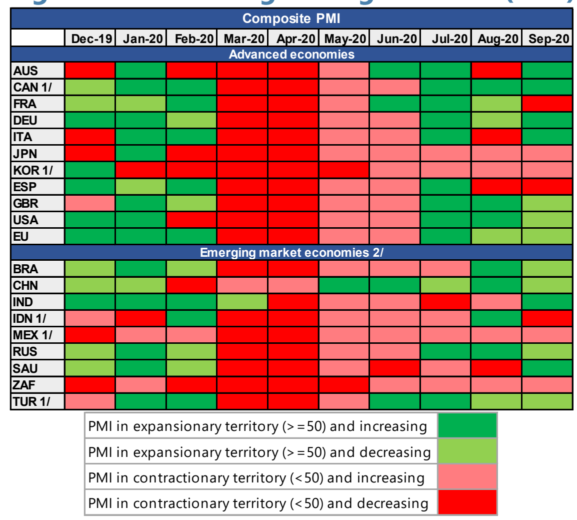
A. Tentative Signs That the Worst Is Over

2. **COVID-19 infections continue to spread**. While some economies managed to mitigate the spread of the virus after its initial global outbreak in the early spring, new outbreaks continue to occur, and while the number of new infections appears to be declining again in some economies, infection rates remain persistently high in many parts of the world. As a result, reopening efforts have been paused or reversed in several countries in order to stop the spread of the virus and save lives.

3. **As mobility picked up from its very low trough, economic activity regained pace, with a strong recovery in the third quarter, but momentum has recently slowed**. After a broad-based adverse demand shock, compounded by supply disruptions early in the year, activity started to recover

in many G-20 economies in late spring. Global financial conditions have also eased considerably since the sharp tightening at the onset of the crisis. Nonetheless, despite a pickup in industrial production and trade, momentum has recently weakened on the back of continued need for social distancing. Overall, global output is expected to contract by 4.4 percent in 2020.

Figure 2. Purchasing Managers Index (PMI)



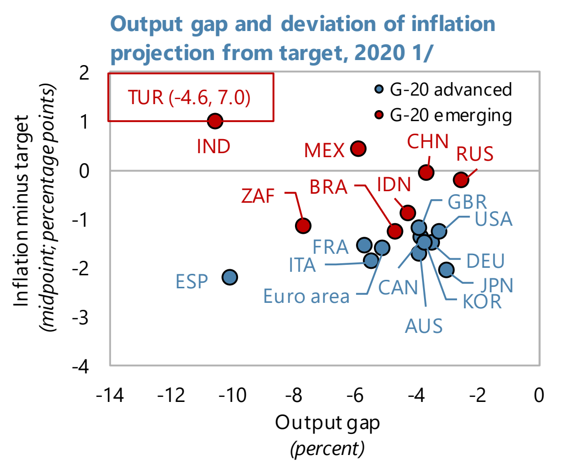
Source: Haver Analytics; IMF staff calculations.
1/ Manufacturing PMIs for CAN, IDN, KOR, MEX, and TUR.
2/ Excludes ARG due to data limitations.

- *In advanced economies, a gradual recovery is under way.* PMI indicators have generally returned to expansionary territory (Figure 2). However, improvements have been uneven in some economies, with services indicators lagging those in manufacturing, and the pick-up in PMIs appears to have stalled in recent months. While trade in advanced economies has picked up, it remains below its pre-crisis level.

- *In emerging market economies, economic activity remains mostly subdued.* Larger-than-expected contractions in some economies in the second quarter prompted a downgrade of growth projections for the year as a whole (e.g., *India*). With the exception of *China*, where most economic indicators returned to expansionary territory by May, most G-20 emerging market economies continue to struggle, including amid persistent outbreaks of infections (e.g., *Brazil*, *Mexico*) or the confluence of the pandemic with depressed export prices (*Saudi Arabia*). While portfolio capital has returned to many economies (following outflows and currency depreciations comparable to those seen during the Global Financial Crisis), volatility remains. Driven by the strong turnaround in *China*, trade volumes in emerging market economies have strengthened markedly.

4. Weak labor markets and depressed demand have contributed to downward pressure on headline inflation, while food experienced some increase in prices (Figures 3 and 4). Despite improvements in the labor market, unemployment rates in many economies remain high. In turn, weak aggregate demand and a decline in commodity prices have contributed to weaker headline inflation, despite a decline in supply from lockdown restrictions and disruptions to international trade. Yet, a rise in prices for food,

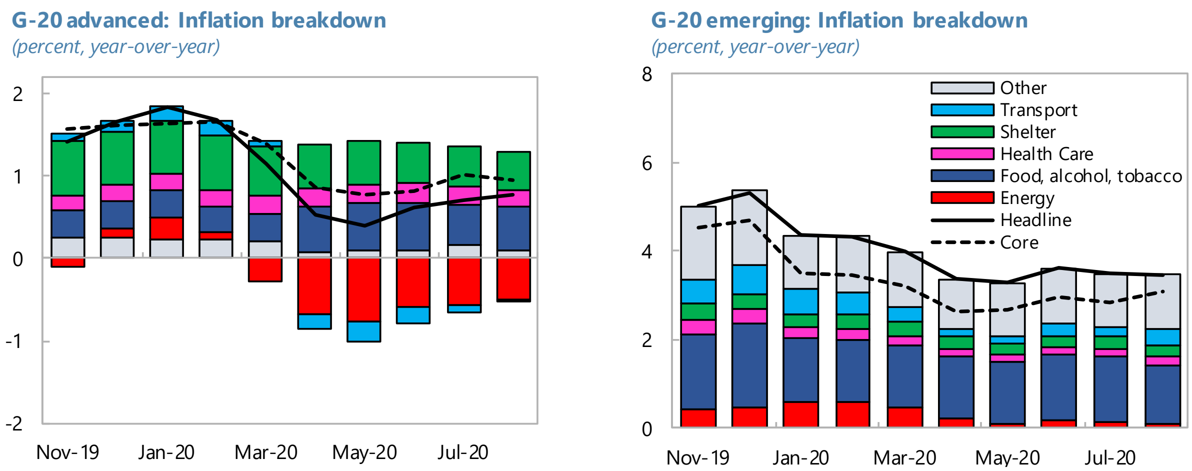
Figure 3. Inflation and Output Gaps



Sources: IMF, *World Economic Outlook*; IMF staff calculations.
1/ USA: PCE inflation; TUR, RUS: end-of-period CPI inflation; all others: period-average CPI inflation. ARG, SAU: excluded as they do not have inflation targets. The European Central Bank targets the HICP as a medium-term objective for the euro area as a whole. For presentational purposes, the ECB objective is used for individual euro area members (DEU, ESP, FRA, ITA). ESP is a permanent invitee.

health care, and shelter in several economies has particularly impacted the poorest segments of the population that are spending a larger share of their income on essential items.

Figure 4. Drivers of CPI Inflation

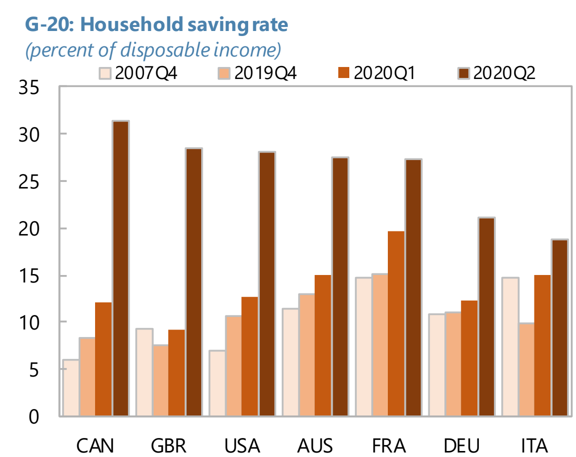


Sources: Haver Analytics; IMF staff calculations.

Note: PPP-weighted averages across countries of year-on-year changes. Advanced economies: *Canada*, *France*, *Germany*, *Italy*, *Japan*, *Korea*, *Spain*, *United Kingdom*, *United States*. Emerging market economies: *Brazil*, *Russia*, *South Africa*, *Turkey*. Sectoral CPI is calculated as the weighted average of the respective underlying expenditure categories for each country. Headline CPI is a weighted average of all sectors; core CPI is a weighted average of sectoral CPI, excl. energy, food, alcohol, and tobacco; "other" includes expenditure categories related to apparel, communication, education, household goods, personal, and recreation.

5. **The drop in demand has led to a marked rise in the household saving rate in advanced economies**. All advanced G-20 economies with available data have seen a strong increase in household saving rates in the first part of this year (Figure 5). This points to precautionary savings arising from heightened uncertainty about job security and health-related expenditures as well as forced savings from the impact of mobility restrictions on consumption, often in the context of income support measures.

Figure 5. Household Saving



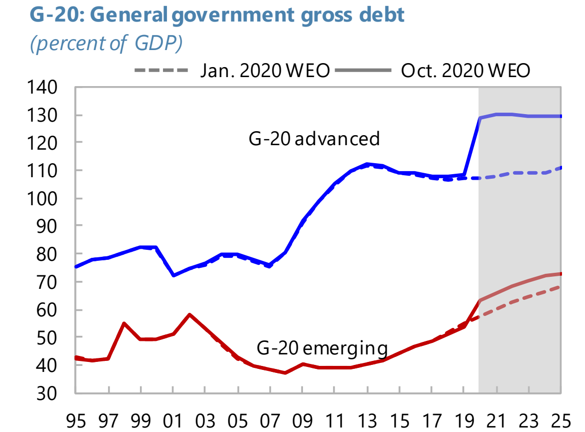
Sources: Haver Analytics; IMF, *World Economic Outlook*.

B. Debt Has Increased Dramatically

6. Public- and private-sector debt have risen.

- *Advanced economies.* As a result of the crisis and resulting need for policy action, in 2020 alone, public debt is expected to shift upward by about 20 percentage points of GDP on average in G-20 advanced economies relative to last year, representing the highest level of debt since World War II (Figure 6). This reflects the combined effect of large fiscal deficits and the unprecedented decline in activity. Private-sector debt has also picked up, driven in particular by financial and non-financial corporates and to a lesser extent by some households, who, together with firms, have attempted to smooth consumption over the downturn and may also have taken advantage of low borrowing costs.

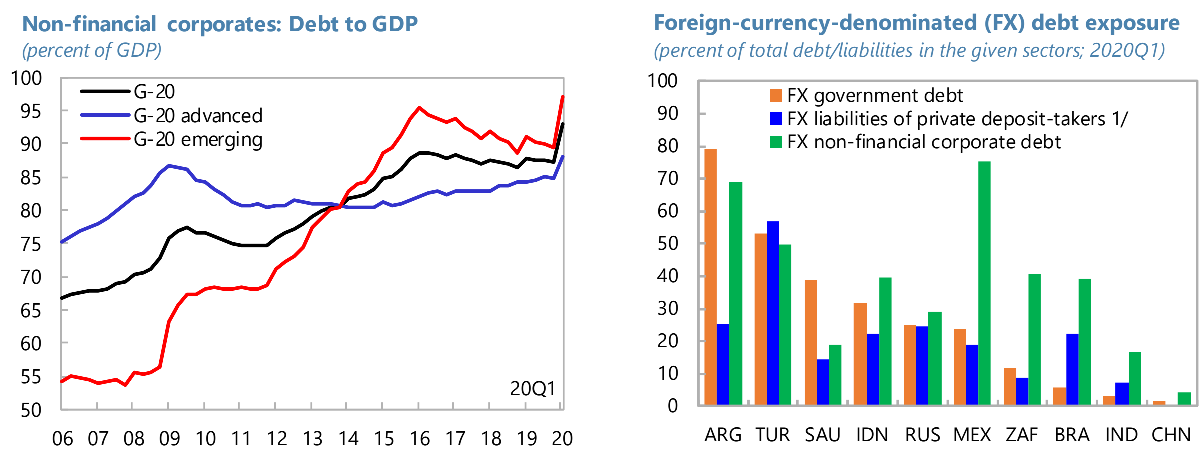
Figure 6. Public-Sector Debt Projections



Sources: IMF, *World Economic Outlook;* IMF staff calculations.

- *Emerging market economies.* Public debt in many G-20 emerging market economies is projected to rise by around 10 percent of GDP this year from last, with the more moderate increase relative to advanced economies partly reflecting more limited fiscal space prior to the pandemic. However, currency depreciations combined with sharp declines in output have led to rising foreign currency-denominated debt-to-GDP ratios in some economies (*Mexico, Turkey)* (Figure 7).

Figure 7. Private-Sector and Foreign Currency-Denominated Debt



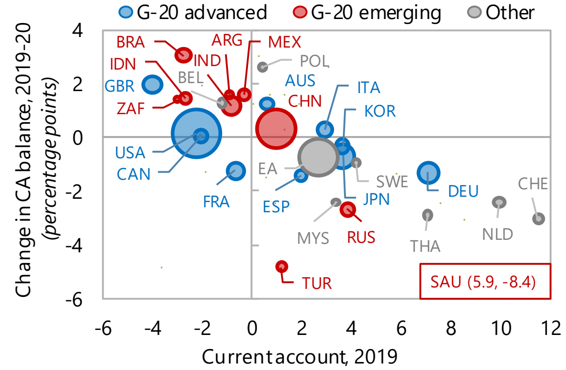
Sources: Haver Analytics; IIF; IMF, Financial Soundness Indicators; IMF, *World Economic Outlook*; IMF staff calculations.
1/ CHN: no data available.

7. Current account imbalances have narrowed slightly but stock imbalances remain large. Current account deficits can help boost investment and smooth consumption in fast-growing markets, and surpluses help accumulate savings in economies with aging populations. However, excess imbalances may signal inefficiencies or risks, as they may reflect underlying internal imbalances (e.g., too restrictive or expansionary fiscal policy, structural policy distortions, or misallocation of capital). At 1.2 percent of GDP (reflecting about 40 percent of overall current account surpluses and deficits), global *excess* current account imbalances in 2019 were only slightly smaller than in 2018. In this respect, excess current account surpluses were substantial only in a few economies (e.g., *Germany)*. Excess deficits occurred in *Argentina*, *Saudi Arabia*, and the *United Kingdom*.[1] In 2020, *actual* current account surpluses and deficits are projected to narrow amid weak demand (Figure 8). At the same time, stock positions of external assets and liabilities have remained at around historic highs. An update of the G-20 Indicative Guidelines identifies 11 G-20 economies as having macroeconomic imbalances (Annex IV).

Figure 8. Current Accounts

Current account for 2019 and projected change in CA balances, 2019-20

(percent of GDP)



Sources: IMF, *World Economic Outlook*; IMF staff calculations.
Note: Bubble size proportional to nominal GDP in USD, 2019. CA denotes current account.

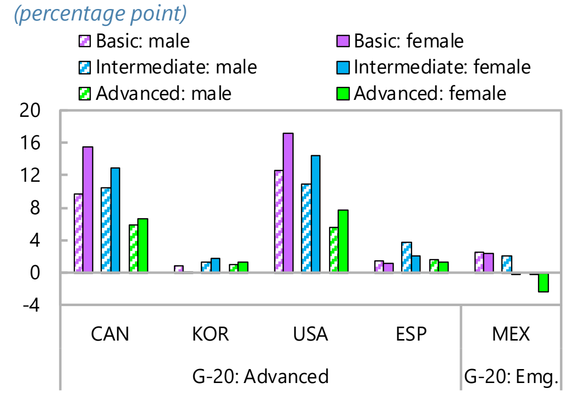
C. The Poorest Have Become Poorer in an Increasingly Unequal World

8. The pandemic and the economic fallout have had very uneven effects on different groups of people, often deepening pre-existing inequalities. Low- and medium-skilled workers have been particularly impacted by rising unemployment (Figure 9). In this respect, the crisis has been especially challenging for the poor, as they often hold low-paying jobs that have been disproportionately affected—partly as these jobs frequently are also less amenable to remote-work (e.g., retail, tourism, hospitality). Poorer segments of the population are also more often employed in the informal sector where employment relationships are more easily broken. In turn,

Figure 9. Employment by Skill Level

Change in unemployment rate by sex and education, from 2019Q4 to 2020Q2

(percentage point)



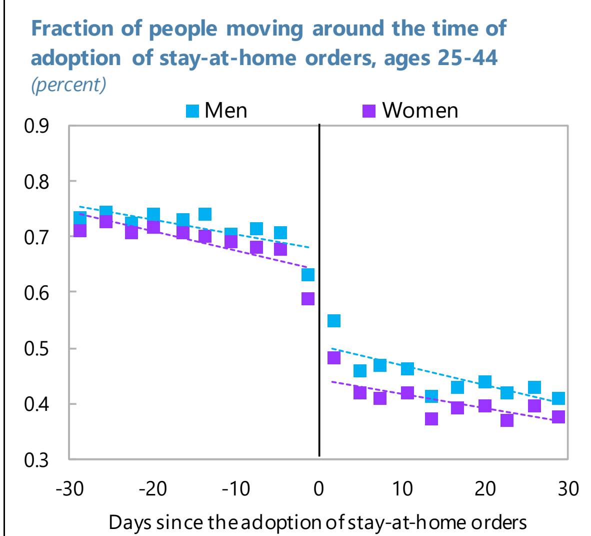
Source: ILOSTAT; IMF, *World Economic Outlook;* IMF staff calculations.
Note: Ages 15–64. Basic: primary and lower secondary education; intermediate: upper-secondary and post-secondary non-tertiary education; advanced: above post-secondary non-tertiary education. KOR: as of March 2020.

[1] See IMF, 2020, "External Sector Report: Global Imbalances and the COVID-19 Crisis."

millions of job losses have adversely impacted living standards, and poverty rates are rising sharply across the globe.[2]

9. Women and youth have been particularly impacted. Not only do many women work in hard-hit sectors that require face-to-face interactions (e.g., tourism, retail), their labor force participation has also fallen in several economies. This has occurred amid reduced opportunities for work, but also as additional family responsibilities may prevent job search (e.g., *Brazil*, *Italy*, *Japan*, *Korea*). There are many challenges on this front for working mothers who often bear the brunt of family care responsibilities such as caring for the sick and home schooling in the context of school closures (Figure 10). Likewise, young workers have seen a sizable rise in unemployment, likely translating into human capital depreciation and a permanent income loss.

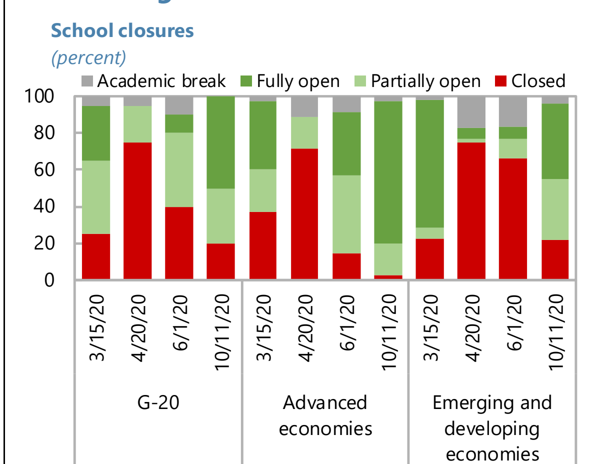
Figure 10. Impact of Lockdown on Mobility



Source: IMF, *World Economic Outlook*, Chapter 2, Oct. 2020.

10. Widespread school closures are adversely affecting the human capital of younger generations. Many students in primary and secondary education have been unable to access in-person learning as schools were closed or shifted to remote learning to contain the spread of the disease. According to UNICEF, at the height of nationwide and local lockdowns, nearly 1.5 billion children were affected by school closures (Figure 11). Almost 500 million children could be reached by remote learning programs. In addition, children may drop out of school for financial or family reasons, with long-term consequences for earnings and inequality.

Figure 11. School Closures



Sources: UNESCO; IMF staff calculations.
Note: Based on 35 advanced economies and 153 emerging market and developing economies. G-20 = G-19 + ESP. ESP is a permanent invitee. "Fully open": for the majority of schools, classes are being held exclusively in person.

11. Uneven access to opportunities is compounding the effects. Children in poorer households are more exposed to damages from school closures due to a lack of internet access for distance learning opportunities and reliance on school meals. Uneven access to health care is adding to the challenges amid already stretched health systems. In addition, people in the informal sector (which in emerging market and developing economies continues to account for a large share of

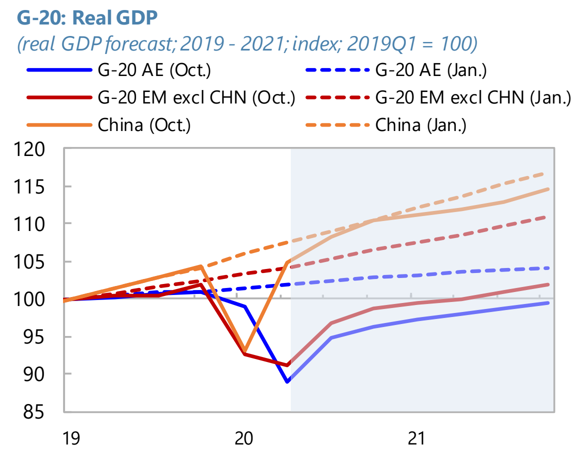
[2] The COVID-19 crisis may push 90 million people into extreme poverty this year (IMF, 2020, Fiscal Monitor, October).

activity) are left with little or no access to social protection. Going forward, absent decisive policy actions to strengthen inclusion, losses in income and opportunities could be passed down through generations.

D. Achieving Sustained Strong Growth Has Become More Challenging

12. Near-term prospects are subdued. The forecast is predicated on the assumption that social distancing will persist into 2021 but will then decline over time as therapies and vaccine coverage improve. While global growth is expected to pick up to 5.2 percent in 2021, the exceptionally deep recession this year will still leave the level of output in 2021 below the average level in 2019 in many advanced and emerging market economies (excluding *China*) (Figure 12). Contributing to the shallow recovery is also a drag from the hard-hit service sector, which continues to struggle as many activities that require in-person interactions are held back by the lingering need for social distancing. This is in sharp contrast to a typical economic cycle, where the consumption of services does not display large swings. Despite unprecedented policy measures to support firms' liquidity, bankruptcies and corporate default risks have risen and banks have increased their loan loss provisions.

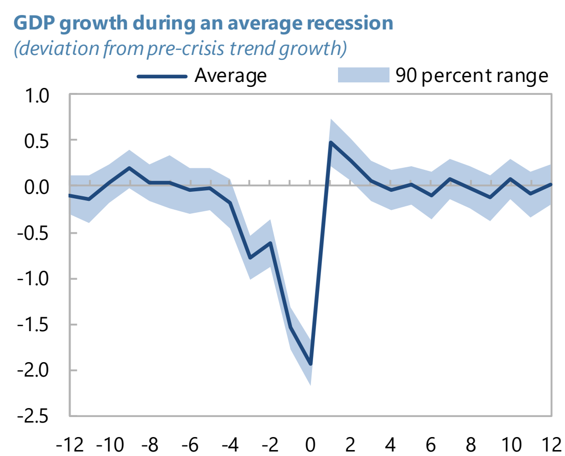
Figure 12. Quarterly Real GDP



Sources: IMF, *World Economic Outlook*; IMF staff calculations.
Note: Data through 2021Q4.

13. Further ahead, output is projected to remain below the pre-crisis trend, and medium-term growth prospects are unsatisfactory. While global growth over the next two years is expected to be high, it is projected to make up only a fraction of lost output during 2020—a pattern often observed during recoveries (Figure 13). Currently, global output in 2023 is projected at around 5 percent below pre-pandemic projections, pointing to the need for significant structural changes to modes of production, distribution, and consumption to allow economies to operate in ways compatible with social distancing until effective therapies and vaccine(s) are widely available.

Figure 13. Real GDP Growth in Recessions

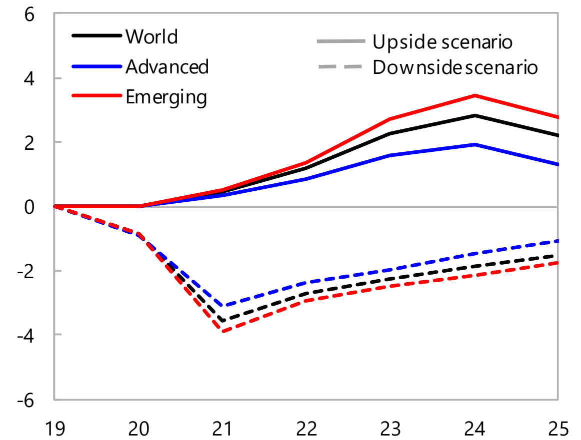


Sources: OECD; IMF staff calculations.
Note: Constructed from a sample of 176 recessions in OECD countries from 1960 to 2007. See Annex V for details.

14. Uncertainty around the global forecast is larger than usual. Notably, uncertainty is high regarding the path of the pandemic, which depends importantly on the speed and effectiveness of therapies and vaccines and behaviors (e.g., testing, contact tracing, social distancing, and mask wearing) that can impact how well people will be able to revive economic activities amidst continued infection risk. In the absence of effective vaccines, social distancing (including avoiding large gatherings) remains key to keeping the pandemic under control. Uncertainty also remains regarding the extent to which economic policy support measures will be extended as well as their effectiveness.

Figure 14. Upside and Downside Scenarios

Impact on real GDP: Alternative scenarios in the fight against the virus *(percent deviation from baseline)*



Source: IMF, World Economic Outlook, October 2020.

15. **Over the near term, the path of the pandemic, among other factors, could materially alter the path of the global recovery**. On the upside, if vaccines and therapies are developed and produced rapidly, and distributed to allow for a quicker normalization of mobility and a more rapid resumption of contact-intensive activities, a stronger-than-projected recovery could materialize (Figure 14). Moreover, such a scenario would likely imply a lower degree of scarring, as bankruptcies would be fewer and unemployment spells shorter. Conversely, delays in treatments or a renewed pickup in the rate of infections would slow the recovery and deepen the scars. In addition, risks arise from a sudden tightening of financial conditions, for example triggered by disappointments regarding vaccine developments, which could amplify the effect of any adverse shocks. Rising protectionism—including with regards to the distribution of vaccines and therapeutics—a re-escalation of trade tensions, or rising social or geopolitical tensions could also hold back growth. On the policy side, extensions of fiscal measures beyond what is already incorporated into the baseline would help strengthen the recovery, while a failure to enact announced extensions or a low take-up of support would weaken it.

16. **Over the longer term, the extent of scarring—damage to potential output—will depend critically on the duration of the acute phase of the crisis and effectiveness of policy responses**. If the spread of the disease prolongs the acute phase of the crisis, job creation will be held back, and scars on medium-term growth will be deeper. This will be particularly relevant if policy actions are insufficient or ineffective in countering these damages. While successful digitization of economies could boost productivity, including from improvements in production, distribution, and payment systems, a materialization of downside risks could worsen productivity trends. For example, a prolonged reallocation process from shrinking to expanding sectors could entail high structural unemployment amid skill mismatches, in part because hard-hit sectors such as restaurants, hotels, and recreation employ a particularly high share of low-skilled workers. These workers may face challenges in finding jobs in those sectors where employment has been growing during the pandemic, which may require a higher-skilled labor force. Reduced labor force participation and weaker human capital would also ensue, as would additional bankruptcies as income prospects are reduced for firms that are not able to restructure their production technologies. In this respect, potential growth may also be weighed down by losses in organizational knowledge and know-how as business fail or as

capital is allocated inefficiently, for example in the context of unduly long bankruptcy procedures. In such a scenario, public debt burdens will likely be higher, inflation expectations may become de-anchored, and monetary policy may become less effective amid persistently low interest rates. As the most vulnerable are likely to continue to be hurt the most, this would further worsen inequality.

17. Climate change is adding to challenges as it will likely continue to disrupt growth in many economies, particularly small and vulnerable ones. Climate change is already leading to more frequent and more severe natural disasters around the world. Though the window for limiting greenhouse gas emissions and global temperature increases to safe levels is rapidly closing, the need to urgently stop the pandemic may lessen focus on mitigating climate change. The temporary reduction in emissions on account of the lockdowns earlier this year correspond to a negligible fraction of the accumulated stock of emissions driving global warming. Unless bold actions are taken, emissions are expected to return to the pre-pandemic trend as mobility picks up and the recovery takes hold. The result of accumulating greenhouse gas emissions will be even more frequent disruptions from natural disasters.

URGENT: END THE CRISIS AND HEAL THE WOUNDS

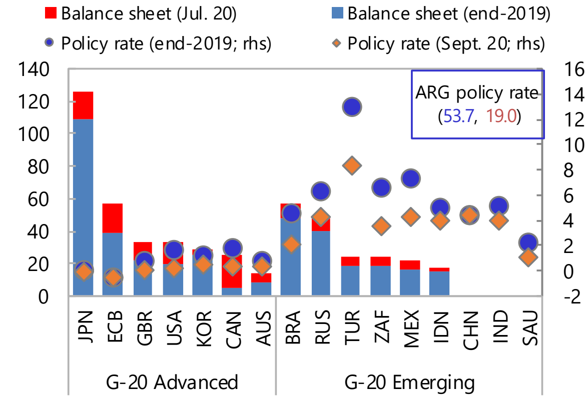
To secure a strong global economy, policymakers must urgently focus on bringing the health crisis to an end. Until the crisis is behind us, continued economic support will be necessary. Policymakers will need to be agile in responding to the needs, but also use the opportunity of recovery policies to build a better future and foster medium-term goals. Strong, inclusive growth requires facilitating a reallocation of resources towards viable activities and ensuring enhanced access to opportunities for all, including to high-quality education and reskilling. To minimize scars, it will be key to implement strong structural reforms to lift the growth potential, strengthen fiscal balance sheets, and bolster resilience by mitigating and adapting to climate change. Moreover, such actions can reinforce each other, as reforms to make growth more inclusive can also help strengthen demand.

A. Most Economies Have Provided Sizable Macroeconomic Support

18. At the onset of the crisis, swift and substantial monetary and financial sector actions in many economies provided support and helped safeguard financial stability. To ease the rapidly tightening financial conditions, many G-20 economies quickly lowered policy interest rates and provided substantial liquidity through government and corporate asset purchases in primary and secondary markets, as well as used other unconventional tools (e.g., expanded repo operations and direct lending to banks and firms). Five out of the six central banks among G-20 advanced economies now have policy interest rates at or below 0.25 percent (Figure 15), and while there is further conventional space in G-20 emerging market economies, policy interest rates are at their lowest levels since before the Global Financial Crisis. In emerging market economies, some authorities also employed unconventional tools (*Turkey, India, Indonesia, South Africa*)—primarily in the form of asset purchases. Some economies engaged in exchange rate intervention (*Brazil, Indonesia, Turkey)*. Central banks in two G-20 emerging market economies (*Mexico*, *Brazil*) were among the nine central banks that had renewed access to the U.S. Federal Reserve's temporary bilateral central bank foreign currency swap lines, which helped ease short-term dollar funding pressures in domestic markets. Alongside, regulators used the inherent flexibility of the regulatory framework and encouraged the use of capital, liquidity, and macroprudential buffers, which supported lending and helped maintain financial stability.

Figure 15. Monetary Policy Easing

G-20: Central bank balance sheet and policy rates
(percent of GDP; policy interest rate in percent)



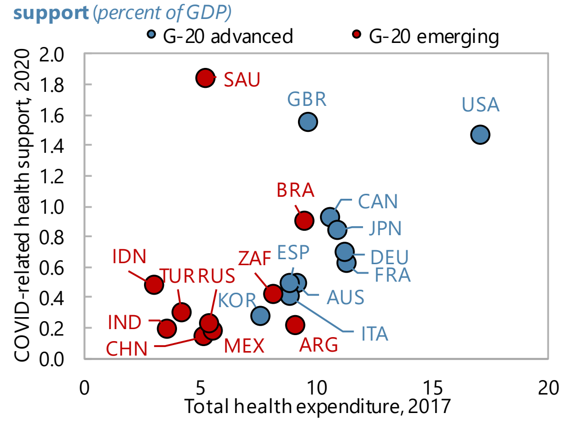
Sources: Haver Analytics; IMF, *Global Data Source*; IMF, *World Economic Outlook*; IMF staff calculations.
Note: Balance sheet for JPN: May 2020; for KOR, BRA: June. For ARG, CHN, IND, SAU: balance sheet data not available. ECB: deposit facility rate. SAU has a fixed exchange rate.

19. Sizable fiscal support in most economies helped raise health care capacity and contain the severity of the economic fallout. Fiscal support in the G-20 during the pandemic has amounted to around US$ 11 trillion, and provided needed support to the health sector, individuals, and firms (Figure 17). In turn, sizable expansions of both discretionary spending and automatic stabilizers in most economies led to record high fiscal deficits and public-sector debt levels. However, governments are benefiting from historically low borrowing costs, which help to contain the rise in debt service burdens. Notably, the sizable fiscal support helped avoid even worse outcomes.

- *An important share of support was directed at the health care sector*. Health-related spending amounted to 1.1 percent of GDP in G-20 advanced economies and 0.3 percent of GDP in G-20 emerging market economies (Figure 16). Such spending helped boost capacity amid a surge in hospitalizations. Those economies that allocated more fiscal support to the health sector during the crisis also tended to be those that had higher levels of health expenditure prior to the crisis.

Figure 16. Health Expenditures

G-20: Initial health expenditure vs. COVID-related health support *(percent of GDP)*



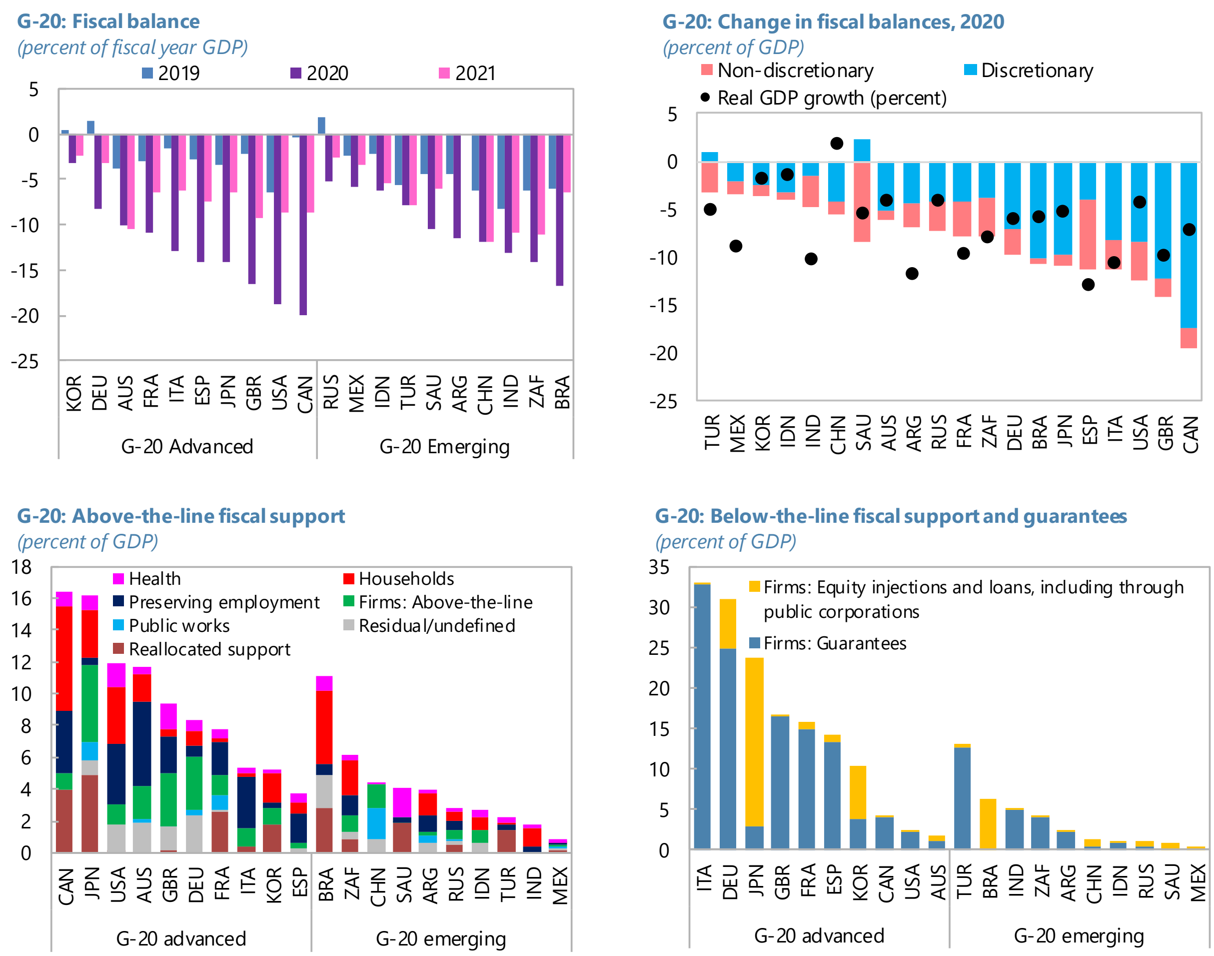
Sources: World Bank, *World Development Indicators;* IMF staff estimates.
Note: ESP is a permanent invitee.

- *Support for individuals and households was provided through a range of measures*. In addition to the impact of automatic stabilizers, support for households amounted to 2.5 percent of GDP among G-20 advanced economies and 0.6 percent of GDP in G-20 emerging market economies. In addition, indirect support was prevalent, including through wage subsidies to help preserve employment relationships with firms, (e.g., Job Keeper Payment in *Australia*; employment protection in *Brazil*; Employment Adjustment Subsidy in *Japan*; SANED in *Saudi Arabia;* and Paycheck Protection Program and Employee Retention Tax Credit in the *United*

States) and short-term work schemes (e.g., Kurzarbeit in *Germany*; Activité partielle in *France*; Cassa Integrazione Guadagni in *Italy;* Expedientes de Regulación Temporal de Empleo in *Spain*.).

- *Support for businesses covered a wide set of firms but was often targeted toward small and medium-sized enterprises*. Direct and indirect support for firms provided notable temporary relief (e.g., *Australia, Brazil, Canada, China, France*, *Germany*, *India*, *Italy*, *Japan*, *Korea*, *Saudi Arabia, South Africa*, *Spain*, *Turkey*, *United Kingdom*). Support took the form of both above-the-line measures (e.g., revenue and spending measures), which on average amounted to 2.0 percent of GDP in G-20 advanced economies and 0.8 percent of GDP in G-20 emerging market economies, and below-the-line support and contingent liabilities (e.g., equity injections, loans, and guarantees), which on average amounted to about 12 percent of GDP in G-20 advanced economies and 2.8 percent of GDP in G-20 emerging market economies.

Figure 17. Fiscal Expansion



Sources: IMF, *World Economic Outlook;* country authorities; IMF staff calculations.
Notes: Top left panel: ARG: only 2019 and 2020 shown.Top right panel: Discretionary fiscal support: change in the cyclically-adjusted primary balance; non-discretionary support is the residual change in the fiscal balance. For measuring discretionary fiscal support: DEU: excludes one-offs; RUS: change in non-oil primary balance; SAU: change in non-exported oil primary balance (percent of non-oil GDP). Bottom left panel: Reallocated spending includes deferred revenue and accelerated spending. Bottom left and right panel: Data as of September 25, 2020. ESP is a permanent invitee.

B. Policy Support Must Continue till the Health Crisis Is Behind Us

20. Going forward, the immediate priority remains to control the virus with the least economic harm. A safe reopening of economies requires the adoption of widespread rapid and affordable testing, contact tracing, some degree of social distancing, hand washing, and use of masks. However, for the pandemic to be over, effective medical solutions are needed. These solutions will require close multilateral collaboration (see below). Alongside, minimizing long-lasting economic harm can only be achieved through continued support to individuals, jobs, firms, and hard-hit localities, through the crisis.

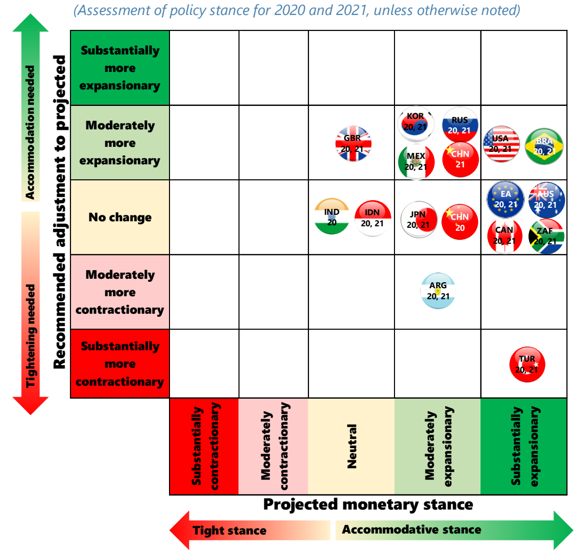
21. Monetary and financial sector policy will need to continue providing accommodation across most of the G-20 and safeguard stability.

- *Monetary policy should generally remain accommodative.* With the recovery yet to take hold, inflation generally below targets, and employment to remain weak until at least end-2021, monetary policy is expected to remain helpfully accommodative in almost all G-20 economies (Figure 18). In some economies, further easing, either through lower interest rates or increasing asset purchases, would be beneficial already at this stage (e.g., *Korea*, *Mexico*, *United States*). Amid increasingly limited conventional monetary policy space, all tools should remain available to act as needed, though some emerging market economies (e.g., *Argentina*, *Turkey*) would need to withdraw some support to counter inflationary pressures.
- *Financial sector policy must continue to target stability.* As financial conditions could tighten suddenly, authorities should remain vigilant to guard against such conditions and continue to stand ready to support stability and the functioning of markets. It will also be important to expand the macroprudential policy toolkit and improve the effectiveness of existing tools to mitigate growing vulnerabilities outside the banking sector (*United States),* introduce income-based macroprudential instruments such as a cap on debt-service-to-income and debt-to-income ratios (*Germany),* strengthen supervision and banking sector competition (*Argentina)*, remove implicit guarantees to state-owned enterprises and improve credit allocation (*China)*, and ensure resolution frameworks for financial institutions in line with international best practices (e.g., *China*, *South Africa*).

Figure 18. Monetary Policy, 2020–21

Monetary policy stance

(Assessment of policy stance for 2020 and 2021, unless otherwise noted)



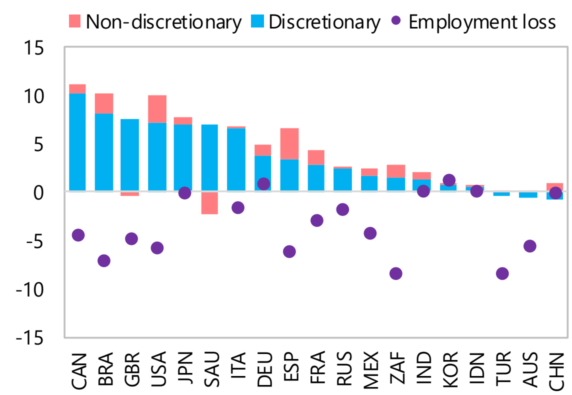
Sources: IMF staff estimates and recommendations.
Note: Substantially more expansionary/contractionary: recommended interest rate easing/tightening of more than 100 basis points. Moderately more expansionary/contractionary: recommended easing/tightening of less than 100 basis points. For some economies, easing could occur through asset purchases. The ECB conducts monetary policy for the euro area (EA) as a whole, including DEU, ESP, FRA, ITA. SAU not shown as it has a fixed exchange rate.

22. Fiscal policy will need to continue to provide targeted support to vulnerable households and firms. To the extent that automatic stabilizers are not providing sufficient safety nets during this deep and unique crisis, well-targeted support for vulnerable households should remain in place until individuals can return to the workforce. In addition, well-targeted support to viable firms to maintain employment relationships and organizational know-how is warranted. In this context, additional support this year would be appropriate in some economies (e.g., *India*, *Mexico*, *Russia*, *Saudi Arabia*, *Turkey*, *United States*). However, as some sectors will likely face a prolonged decline, a reallocation of workers from shrinking to expanding sectors and firms will be unavoidable but challenging as it will require training and reskilling of workers in addition to unemployment compensation. In this respect, fiscal support for firms should not hinder the transfer of resources from sectors that may permanently shrink to those sectors that will be expanding; and there will be an increasing need to distinguish between illiquid but solvent firms and those that are insolvent.

23. While a somewhat tighter fiscal stance may be appropriate next year in several economies as economies partially recover, where fiscal space allows, caution is warranted in withdrawing support. Based on implemented policy settings and announced budgets, and in the context of a projected partial recovery in output, fiscal balances are projected to rise markedly in most G-20 economies next year (Figure 19). Notably, in economies where fiscal balances dropped by more than 10 percent of GDP this year, they are expected to improve by more than 5 percent of GDP next year. To some extent, this change is automatic, reflecting higher revenues as activity recovers and lower unemployment spending as people find jobs in an improving economy. Yet, the largest contributors to improvements in fiscal balances relate to reduced discretionary support. Larger support than currently projected is desirable next year in some economies (e.g., *Brazil*, *Mexico*, *United Kingdom*, *United States*) in view of the large drops in the level of employment in these economies and large projected fiscal contractions. In economies where fiscal space is a constraint, a reprioritization of spending may be warranted. For all economies, it will be important to carefully monitor economic and public health developments to ensure that fiscal support is not withdrawn too quickly but maintained through the crisis.

Figure 19. Projected Fiscal Stance, 2021

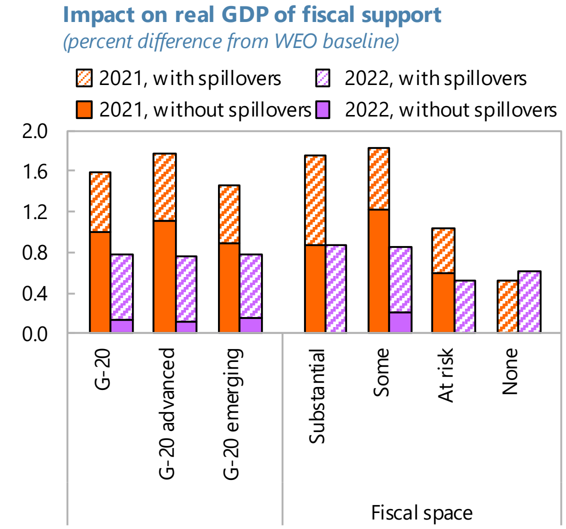
G-20: Change in fiscal balances, 2021
(percentage points of GDP; employment loss in percent)



Sources: IMF, *World Economic Outlook;* IMF staff calculations.
Note: Discretionary fiscal support: change in the cyclically adjusted primary balance; non-discretionary support is the residual. Positive values indicate improvments in the fiscal balance, negative values indicate deteriorations. Employment loss: difference between the projected 2021 level of employment in the Oct. 2020 WEO and the Jan. 2020 WEO in percent of the level projected in the Jan. 2020 WEO. For measuring discretionary fiscal support: DEU: excludes one-offs; RUS: change in non-oil primary balance; SAU: change in non-exported oil primary balance (percent of non-oil GDP). ESP is a permanent invitee.

24. Policymakers should prepare now for downside scenarios where economic activity falls below baseline projections. This would require the identification of discretionary measures that could be swiftly implemented to complement automatic stabilizers. For example, if economies with the largest initial fiscal space were to provide 3 percent of GDP in additional support next year and those with fiscal space at risk were to provide 1 percent of GDP in additional support in the context of supportive monetary policy, this could help lift global output by more than 1½ percent (Figure 20). Moreover, this would be beneficial beyond the individual economies that are providing support. Positive spillovers would also help support demand—including in economies with no fiscal space. In contrast, a too hasty withdrawal of support would not only hurt growth today but would also result in longer-term economic scarring.

Figure 20. Impact of Further Fiscal Support



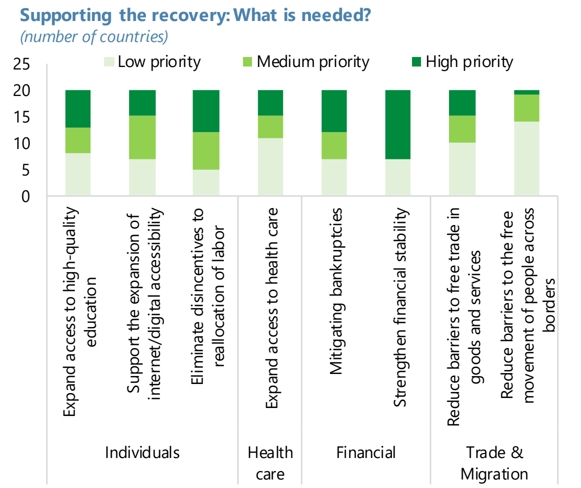
Sources: IMF, G-20 model simulations; IMF, *World Economic Outlook;* IMF staff calculations.
Note: 3 percent of GDP in stimulus in 2021 in economies with substantial/some fiscal space; 1 percent of GDP in stimulus in economies with fiscal space at risk. Fiscal stimulus is withdrawn during 2022-23. Fiscal space reflects pre-pandemic assessments (see 2019 G-20 Report on Strong, Sustainable, Balanced, and Inclusive Growth) and may be revised in upcoming Article IV consultations. See "Assessing Fiscal Space: An Update and Stocktaking" for a discussion of factors considered. "Substantial" fiscal space: AUS, DEU, KOR; "some": CAN, CHN, FRA, GBR, IDN, JPN, MEX, RUS, SAU, TUR, USA; "at risk": BRA, ESP, IND, ITA; and "none": ARG, ZAF. FRA: Fiscal space assessed as "at risk" when EU fiscal rules are taken into account. ESP is a permanent invitee.

25. Complementarities between policy tools can further strengthen their impact. Expansionary fiscal and monetary policy support can amplify each other, especially where policy space is limited. In advanced economies with little conventional monetary policy space remaining, unconventional monetary policy can support expansionary fiscal policy by keeping borrowing costs low and markets liquid. Moreover, non-monetary measures (e.g., halting mortgage payments to help prevent foreclosures during the crisis) can provide temporary support for individuals, thereby supporting demand. Ensuring that fiscal support is properly targeted can help avoid a delay in needed reallocation of resources. Supporting viable firms would help prevent unnecessary capital destruction and loss of productivity from bankruptcies and at the same time support jobs and, thus, demand. Strengthening governance and transparency in public procurement will help maximize both the efficiency and effectiveness of the support, including during the crisis.

C. Reforms Are Vital to Minimize Scars and Lift Potential Growth

26. A number of reforms should be urgently implemented in the context of very weak growth and the need to limit economic scarring, though specific priorities vary across countries (Figure 21).

Figure 21. Policy Needs for the Recovery



Source: IMF staff estimates.

- *Bankruptcies of viable but illiquid firms should be avoided and efficient bankruptcy procedures ensured.* As bankruptcies are set to rise, fiscal support, where warranted, can help limit bankruptcies of viable, but illiquid, firms. At the same time, efficient bankruptcy procedures are also needed to facilitate the reallocation of resources toward those sectors that are expanding and to minimize adjustment costs. In this respect, reforming the insolvency regime or debt resolution system in some economies (e.g., *China*, *Indonesia*, *Italy*, *Spain*, *Turkey*) is necessary to help reduce the presence of zombie firms and speed up the reallocation of capital and labor—and thus quicken the pace of the recovery.

- *Reforms should be implemented to prevent high unemployment from becoming persistent.* Amid high unemployment in a number of economies and a risk that some sectors will fall into prolonged decline, it is vital to complement unemployment insurance with support to the reallocation of workers to expanding sectors, including through access to reskilling. In this respect, the reskilling of workers would not only help prevent cyclically high unemployment from becoming structural, it would also have the added benefit of supporting fiscal strength and demand. In addition, some reforms (e.g., reduction in the labor tax wedge and strengthening childcare) can strongly improve employment prospects even in the short term and can thus reduce labor market scarring in the long run, including for women and youth. Certain other reforms—like those that reduce employment protection for regular workers—provide the most benefits when undertaken during supporting economic conditions. Product market reforms that encourage competition can help support the entry of new firms as demand picks up and thereby also support employment.

- *Human capital must be strengthened, not lost.* With widespread and long-lasting disruptions to education, learners inevitably are at risk of a loss of human capital—in particular where access to the internet is limited and remote-learning is more challenging. Hence, reforms to bolster the digital economy are increasingly in need. And such reforms can also have a beneficial impact elsewhere: beyond facilitating online learning, adoption of information technology can facilitate teleworking and mitigate the reliance on mobility for employment and reskilling in many sectors.

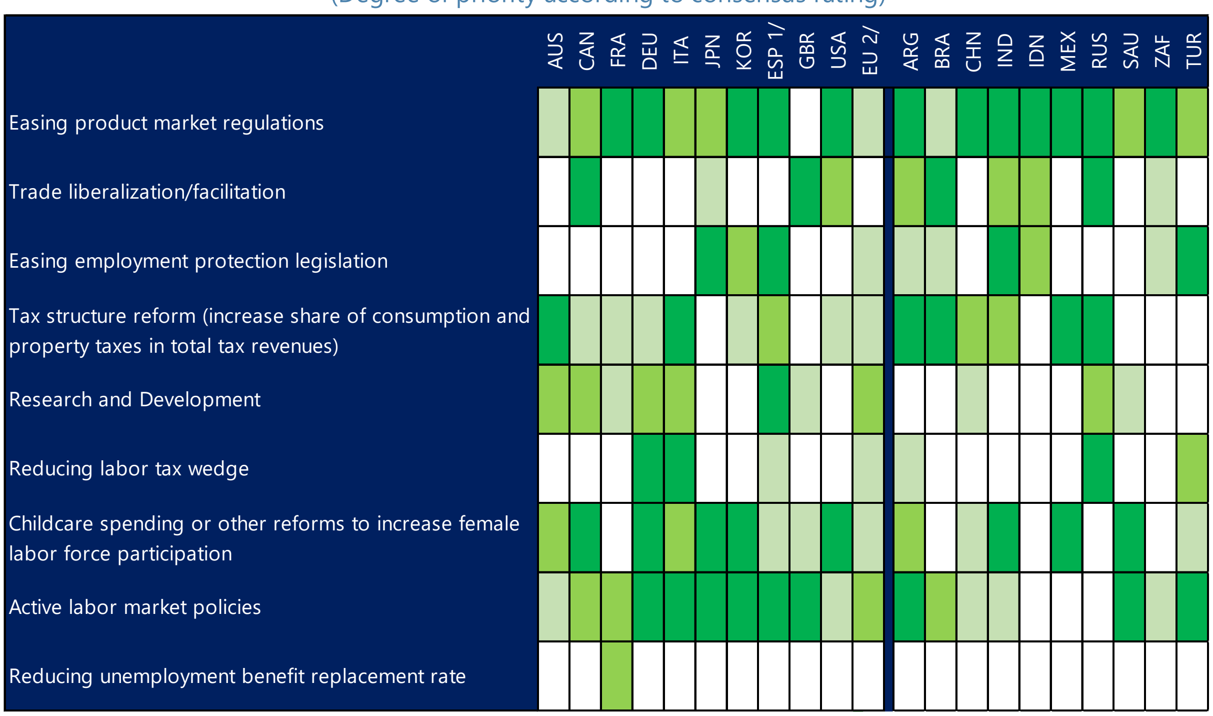
27. The consensus IMF-OECD assessment of overall structural reform needs also highlights a number of key reform areas that it will be important to press ahead with. For example, while progress on the reform agenda has continued, some reforms (such as easing product market regulations or reforming the tax structure) are priorities in almost all G-20 economies (Figure 22). But several other reforms are also of the essence.

- *In most advanced economies, further labor market reforms are needed*. For example, boosting female labor force participation, including through childcare spending, and strengthening active labor market policies are important reform areas. In addition, easing employment protection legislation is a priority to raise the dynamism of job markets in *Korea* and *Spain*, while reducing the labor tax wedge is especially important in *Germany* and *Italy*.

- *In emerging market economies, structural reform priorities include trade, labor market, and tax structure reforms*. Trade liberalization, easing of employment protection, and tax structure reforms are high on the list of recommended reforms in most emerging economies. Furthermore, active labor market policies should be reformed in *Saudi Arabia* and *Turkey*, while supporting childcare in *Saudi Arabia*. In *Russia,* a reduction in social security contributions for SMEs has been adopted, though a further reduction of the labor tax wedge would be beneficial.

Figure 22. Structural Reform Recommendations

(Degree of priority according to consensus rating)

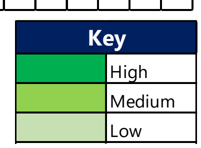


Sources: Based on a consensus assessment by IMF and OECD.

Note: Priorities are country specific and should not be compared across countries. SAU: only IMF rating is used for the consensus rating.

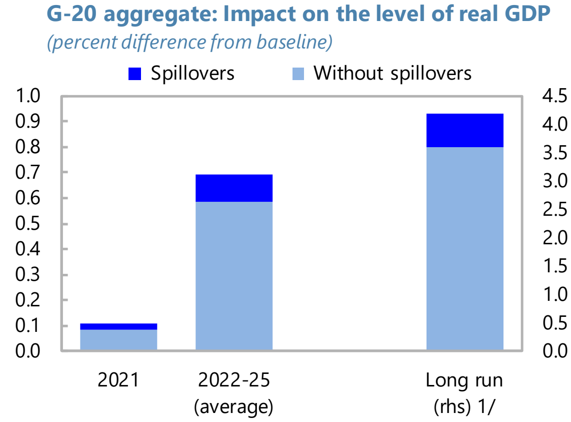
1/ ESP is a permanent invitee.

2/ EU: degree of priority based on a simple average of priorities for EU member countries. For non-G-20 EU member countries, only IMF ratings are used for the consensus rating. EU-wide recommendations are not taken into account.



28. Implementing the recommended structural reforms would set the stage for stronger growth in the future. A gradual implementation of pre-announced structural reforms, in particular in product and labor markets and through tax reform, would boost investment and steadily help lift growth and consumption—over the long run raising output in the G-20 by more than 4 percent above the baseline (Figure 23, Annex III). As stronger activity in individual economies boosts trade and encourages demand across countries, positive spillovers account for a notable share of this boost.

Figure 23. Impact of Structural Reforms

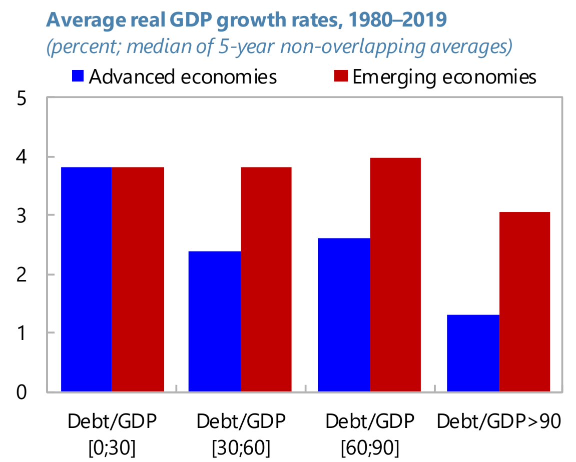


Sources: IMF, G-20 model simulations; IMF, *World Economic Outlook*; IMF staff calculations.
1/ Measured as of 2035.

D. For Durable Growth, Vulnerabilities Must Be Reduced

29. Amid high levels of public-sector debt, once the recovery has firmly taken hold, it will be essential to ensure that debt levels are put on a downward path in many economies. Past episodes with high debt levels have often been associated with periods of lower growth (Figure 24). While the direction of causality is inherently uncertain, several concerns arise related to high debt levels. For example, a growing debt burden may trigger mounting risk premia and can lead to higher overall interest rates with negative implications for investment. Increasing debt service may also leave economies vulnerable to rollover risk amid a sudden tightening of credit conditions, and government debt can soak up available funds and crowd out private investment. Therefore, once the pandemic is arrested, the threat to lives and livelihoods alleviated, and economic activity on a firmer footing, fiscal consolidation efforts should be carried out in most G-20 economies—with a need for further adjustment beyond what is currently projected in several economies (e.g., *France*, *Italy*, *Japan*, *Mexico*, *Spain*, *Turkey*, *United Kingdom*, *United States*). In contrast, in *Germany*, additional fiscal support to help lift productivity growth (e.g., through infrastructure investment) is warranted once the temporary crisis measures expire. Until that time, an extension of fiscal support in those countries with fiscal space is likely to help boost the recovery. Economies with unfavorable borrowing costs may need to initiate fiscal consolidation sooner.

Figure 24. Growth and Public-Sector Debt



Sources: IMF, *World Economic Outlook;* IMF staff calculations.
Note: Covers 193 countries. Averages of annual growth rates.

30. Moreover, policies will need to address remaining excess imbalances both in surplus and deficit economies. While the immediate focus should be on fighting the pandemic and protecting lives and livelihoods, distortions that affected external positions before the COVID-19 crisis may persist, continuing to create vulnerabilities and implying the need for comprehensive reform.

- *Where excess current account surpluses are present, the priority should generally be on reforms that encourage investment and discourage excessive private saving.* Greater public sector investment in areas such as digitization, infrastructure, and climate change mitigation and adaptation would help stimulate private investment and promote potential growth (e.g., *Germany*).
- *For excess deficit countries, fiscal consolidation, while safeguarding potential output and maintaining strong social safety nets, would promote debt sustainability and reduce imbalances*. This is relevant for several economies (*Argentina, Canada, France, South Africa, United Kingdom,* and *United States*). Reforms to increase export competitiveness and further diversification, in case of commodity exporters, are also essential (*Brazil*, *Saudi Arabia*).
- *Where external positions are near balance, efforts should continue to target domestic imbalances, which could also help minimize scars from the pandemic.* Depending on the country, policy actions include medium-term fiscal consolidation, opening markets to competition, strengthening the social safety net, or ensuring wage-productivity alignment *(Australia, China, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, Spain)*.

31. Complementarities between fiscal policy and structural reforms can help the reduction in imbalances while supporting growth. For example, fiscal policies targeted to alleviate scarring, including public investment programs and digitalization upgrades, can contribute to narrowing excess surpluses through higher public spending but also by stimulating private investment in a stronger infrastructure environment over the medium term. Improving fiscal balances would also tend to strengthen external balances by narrowing excess deficits. Post-crisis labor market reforms to reap benefits from new approaches to home-based work can help increase competitiveness and help address excess deficits. To this end, implementing the recommended structural reform package would also help strengthen fiscal buffers, as the boost to activity helps reduce public debt relative to GDP.

E. Scars on the Most Vulnerable People Must Be Eliminated

32. Ensuring adequate support is of crucial importance to protect the most vulnerable in society. In addition to ensuring continued support from macroeconomic policies to limit the impact of the crisis on unemployment, strong safety nets should also be ensured. As such, better targeted social transfers and/or a wider coverage of social protection spending (e.g., *Argentina*, *Brazil*, *Russia, Saudi Arabia, Turkey*) would help safeguard vulnerable groups. Conditional cash transfers and well-targeted food aid could also be extended through the recovery period (e.g., *Indonesia*). In general, if the fallout from the crisis lingers, access to essential goods and services (e.g., food distribution, health, and housing) would need to be expanded, not least amidst rising poverty rates. Food aid to the most vulnerable people can also help supplement cash transfers and protect beneficiaries against higher food prices. Public works programs can provide income and work experience to low-income workers, having the dual benefits of supporting individuals as well as aggregate demand. Reliable safety nets can also help households weather the crisis without curtailing their investments in children's education. Alongside, non-monetary measures can be helpful such as (i) suspending reporting to credit bureaus where consumers fail to pay their financial obligations because of the pandemic (as done in the *United States)*; (ii) ensuring utility contracts are not terminated for lack of payment during the pandemic (as done in *France, Japan,* and *Spain*); and (iii) adding moratoriums on debt enforcement, foreclosures, and evictions (as done in *Australia, Germany, Spain,* and *Turkey)*.

33. To durably reverse the rise in poverty and income inequality and prevent it from becoming permanent, decisive actions to enhance access to opportunities are essential.

- *Enhancing access to health care and other essential services is now urgent.* The pandemic has laid bare and aggravated existing inequalities in access to health care, highlighting the need to put increased focus on the need to ensure that all individuals have access to essential care (e.g., in *Brazil*, *China*, *India*, *Indonesia*, *Italy*, *Mexico*, *Russia*, *South Africa*, *United States*). Equally important is an assurance of access to adequate nutrition, clean water, and sanitation, not least as inadequate health conditions early in life can have long-lasting consequences and result in less-favorable outcomes in adulthood.
- *In addition to limiting scarring to human capital from school closures, ensuring access to quality education more broadly is essential.* High-quality education is vital for enhancing long-term individual outcomes and should be made accessible to children of all socioeconomic backgrounds. In this respect, higher public spending on education is positively associated with education outcomes in terms of learning-adjusted years of schooling. Yet, focus should not only be on the level but also on the efficiency of spending. In this respect, in a number of economies, attention to the level and/or efficiency of spending is warranted (e.g., *Argentina*, *Brazil*, *France*, *India*, *Indonesia*, *Italy*, *Russia*, *Turkey*, *Saudi Arabia, South Africa*, *United Kingdom*, *United States*),[3] as is focus on enhancing foundational skills, developing human capital, and reducing skill gaps. Ensuring access to health care and clean water and sanitation can also help enhance the individual child's ability to learn.
- *Harnessing the power of technology can greatly enhance inclusion.* Furthering the digitization of economies through public investment in digital infrastructure would facilitate access to broadband and internet in low-income areas as well as to several services (e.g., *Argentina*, *Brazil*, *Canada*, *China*, *France*, *Germany*, *Indonesia*, *Italy*, *Japan*, *Mexico*, *Russia*, *South Africa*, *Spain*, *United States*). For example, the digital distribution of emergency cash transfers—akin to those provided in response to the pandemic—enables funds to quickly reach those in need. Facilitating digital payments can also help encourage formalization.
- *Expanding access to financial services is relevant for people as well as for firms.* Financial inclusion—access to saving vehicles, credit, insurance, and digital payments—is crucial for promoting inclusive growth and can partly be expanded through existing tools. For example, leveraging the prevalence of mobile phones can help expand access to financial services in the face of gaps in

[3] IMF/World Bank, 2020, G-20 Background Note on Enhancing Access to Opportunities, June.

bank account ownership. But more needs to be done. Shifting towards electronic government payments and receipts would encourage individuals and firms to obtain accounts at financial institutions. Credit bureaus, movable collateral registries, and effective insolvency regimes can help improve access to credit by SMEs—with gains in employment and economic growth.

GETTING TO STRONG AND DURABLE GROWTH REQUIRES COLLABORATION

An interconnected crisis requires a global response. Much has already been done through debt service relief for the poorest countries and an expansion of the global financial safety net. However, as the crisis is still ongoing, important additional steps need to be taken. Now is the time for the G-20 to stand united around the common goal of ending the crisis through a collaborate effort for vaccine development, production, and distribution and of securing a sustainable future.

A. The Crisis Prompted Important Multilateral Action

34. Supported by the G-20, critically important multilateral actions have lessened debt service burdens for poorer nations. The IMF has modified its Catastrophe Containment and Relief Trust (CCRT) to provide immediate debt service relief to its poorest members. In addition, the IMF's and World Bank's call for a temporary debt service suspension by bilateral official creditors was heeded by the G-20 in creating the Debt Service Suspension Initiative (DSSI), which grants debt-service suspension to the most vulnerable countries. These initiatives are helping the poorest countries to redirect resources from servicing debt to mitigating the severe impact of the pandemic.

35. The global financial safety net has also been strengthened. This year, the IMF approved a doubling of resources available through the New Arrangements to Borrow (NAB) and a framework for a new round of bilateral borrowing agreements (BBA)—helping to maintain the IMF's lending capacity of around US$1 trillion for the coming years. The process of securing creditors' consents is under way. As an immediate response to the global pandemic, the IMF also temporarily doubled access limits for its emergency lending instruments—the concessional Rapid Credit Facility (RCF) and the non-concessional Rapid Financing Instrument (RFI)—and subsequently approved a temporary increase in the annual limits for access to Fund resources under its other instruments. Moreover, a new Short-Term Liquidity Line (SLL)—a special facility designed as a revolving and renewable backstop for members with very strong fundamentals and policy track records—was established. The facility complements the already active bilateral swap lines between major central banks that have helped to avert a squeeze in dollar funding in international markets during the crisis. Access under the Flexible Credit Line was extended to additional economies.

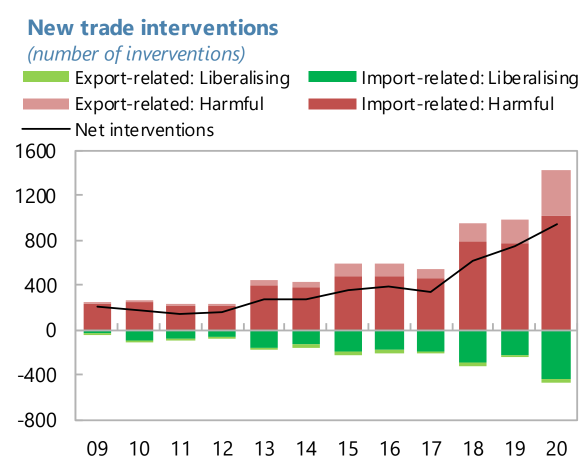
B. Ending the Pandemic Requires Joint Action

36. Collective efforts by the G-20 are crucial to end the health crisis and reignite the global economy. Until an effective vaccine is found, the COVID-19 pandemic will continue to pose significant health and economic risks—resulting in further loss of lives and reversing hard-won progress on poverty reduction. Close collaboration and resolute actions are needed to stop the spread of the virus, revive economic activity safely, and contain the impact on poverty and inequality.

- *The availability of adequate health supplies and medical solutions must be assured in all countries.* Allowing for a fast and safe lifting of mitigation measures depends crucially on global collaboration on a clear strategy for the development, production, purchase, and distribution of testing kits, therapeutics, and vaccines. If authorities in all countries work together, funding such an approach today would allow much larger amounts to be saved later, as additional therapeutic drugs and vaccines and their widespread distribution would help save lives and allow for a quicker return to normal economic activity. According to GAVI, global investments of $US 18 billion would allow for the production of 2 billion doses of vaccines beyond what is already agreed through bilateral deals. Investing in the logistics and transportation of large amounts of vaccines to low-income countries will require up front investments as well.

- *Trade restrictions on essential goods must be immediately lifted and trade tensions deescalated.* A number of new trade interventions, including export restrictions on critical supplies, were prompted by the pandemic and should be lifted without hesitation (Figure 25). Given the high degree of specialization in global value chains for the production of many health-related products, trade restrictions limit the flow of goods at potentially great humanitarian cost. This is especially the case for poor, import-dependent countries. For instance, the World Trade Organization (WTO) has reported that 80 countries and separate customs territories introduced export prohibitions or restrictions on items such as face and eye projection, protective garments, sanitizers, and disinfectants as a result of the COVID-19 pandemic.[4] More broadly, global trade tensions should be deescalated.

Figure 25. Trade Interventions



Source: Global Trade Alert, as of October 19, 2020.

37. As the crisis continues to unfold, strong commitment of international resources remains essential to support poorer economies. Multilateral cooperation in debt crisis resolution is required, especially for poorer countries whose financing needs continue to grow. The uncertainty surrounding the evolution of the pandemic combined with the risks to the recovery and the financial system require that the international community continue to extend and possibly expand the exceptional measures undertaken so far to support poorer nations. These could include enhanced use of the IMF's existing special drawing rights (SDRs). While the DSSI has provided important debt service relief, more support will be needed in the form of concessional financing, debt relief, and grants.

[4] See https://www.wto.org/english/tratop_e/covid19_e/export_prohibitions_report_e.pdf

38. For a sustainable future, global leaders should undertake a concerted effort to curtail carbon emissions. To prevent large human and economic costs down the road, the crisis represents an opportunity to mobilize public and private resources to forcefully promote green investment—designing climate policy in a way to support the recovery and longer-term resilience. In this respect, a number of countries have already taken advantage of the stimulus during the crisis to support a more sustainable future (e.g., *China*, *European Union*, *France*, *Germany*, *Korea*, *Saudi Arabia*, *Spain*, *United Kingdom*). But more needs to be done. This includes more ambitious efforts at adaptation as well as mitigation. Well-designed and sequenced climate mitigation policies can help boost growth after the crisis without burdening placing a large burden on fiscal finances. The estimated impacts of such policies show a boost to growth and employment in the first decade or so, a manageable drag on growth in the medium term (to 2050), and output that could be up to 10 percent higher than it otherwise would be in the very long term (2100), due to avoided damages from climate change.[5] Alongside, it will be important to collaborate to address other multilateral challenges such as related to base erosion and profit shifting (BEPS); the digital taxation framework; debt transparency; and the international financial regulatory reform agenda.

[5] World Economic Outlook, October 2020, Chapter 3.

Annex I. Concepts, Definitions, and Measurement

1. This annex presents concepts, definitions, and measurement relevant for the assessment of the quality of growth and policies. Detailed charts for the four dimensions of strong, sustainable, balanced, and inclusive growth (SSBIG) are presented in Annex II.

A. Strong, Sustainable, Balanced, and Inclusive Growth

2. This section describes how strong, sustainable, balanced, and inclusive growth is operationalized across the four dimensions. While indicators for each of the four individual aspects of growth are listed below, as discussed in the main text, there are important areas of overlap across these four dimensions. For example, the sustainability of growth ultimately depends on growth also being balanced, and vice versa.

- *Strong growth*. This dimension refers to short-term, cyclical growth. Indicators include GDP growth, the output gap, and inflation (in levels and in deviations from inflation targets, where applicable).
- *Sustainable growth*. This dimension refers to medium- and long-term growth. Indicators include potential growth, total factor productivity growth, and labor productivity growth.
- *Balanced growth*. This dimension refers to the composition of growth (e.g., domestic versus external demand) and whether there is a build-up of external and domestic imbalances. *External excess imbalances* are derived from the IMF's External Sector Report, which provides estimates of the extent to which current accounts and real effective exchange rates differ from those warranted by fundamentals and desired policies, while taking into account reserve coverage and international investment position indicators. Indicators of *domestic private imbalances* include (non-financial) private sector debt, the debt service ratio for the private non-financial sector, and asset quality ratios. *Domestic public* imbalances are measured by the level of general government gross debt.
- *Inclusive growth*. This dimension refers to the degree of inequality in *outcomes* and in *opportunities*. Indicators of inequality in *outcomes* include the Gini coefficient and the ratio of the bottom income decile to the top income decile (i.e., the average income of the lowest 10 percent of earners relative to the average income of the top 10 percent of earners). The Gini coefficient captures inequality of outcomes in the broadest sense but is highly sensitive to changes in the middle of the income distribution and is less sensitive to changes in the tails of the distribution. The second measure can capture changes in the extreme ends of the income distribution. Indicators of inequality in *opportunities* include measures of access to education and health (e.g., public expenditure on education and health can be an indicative measure of quality and access).

B. Policies

3. This section presents the indicators used for assessing the policy stances across the fiscal, monetary, and structural reform policy areas.

- *Fiscal policy*. The fiscal policy stance is measured as the change in the cyclically-adjusted primary balance (CAPB), where the balance is computed in percent of potential GDP. A contractionary (expansionary) fiscal policy stance reflects a positive (negative) change in the CAPB. The current and projected fiscal policy stance reflects the WEO baseline projections.
- *Monetary policy*. The monetary policy stance is measured as the difference between the actual real policy interest rate and approximations/estimates of the (unobservable) natural real interest rate. A contractionary (expansionary) or tight (accommodative) monetary policy stance reflects an actual real policy interest rate above (below) the natural rate.
- *Structural reforms*. The structural reform policy areas considered are those for which there are quantifiable indicators of structural reforms. These include (i) product market regulation; (ii) trade liberalization; (iii) employment protection legislation; (iv) tax structure reform (direct vs. indirect taxes); (v) Research and Development (R&D) spending; (vi) labor tax wedge; (vii) childcare spending (or other reforms to increase female labor force participation); (viii) active labor market policies; and (ix) unemployment benefit replacement rates. While this set of indicators captures key structural reform needs, it does not necessarily provide a complete description of the structural reform agenda for every country. Structural reform recommendations reflect consensus assessments of the IMF and the OECD and are expressed in terms of reform priorities (“high”, “medium”, or “low”).[1]

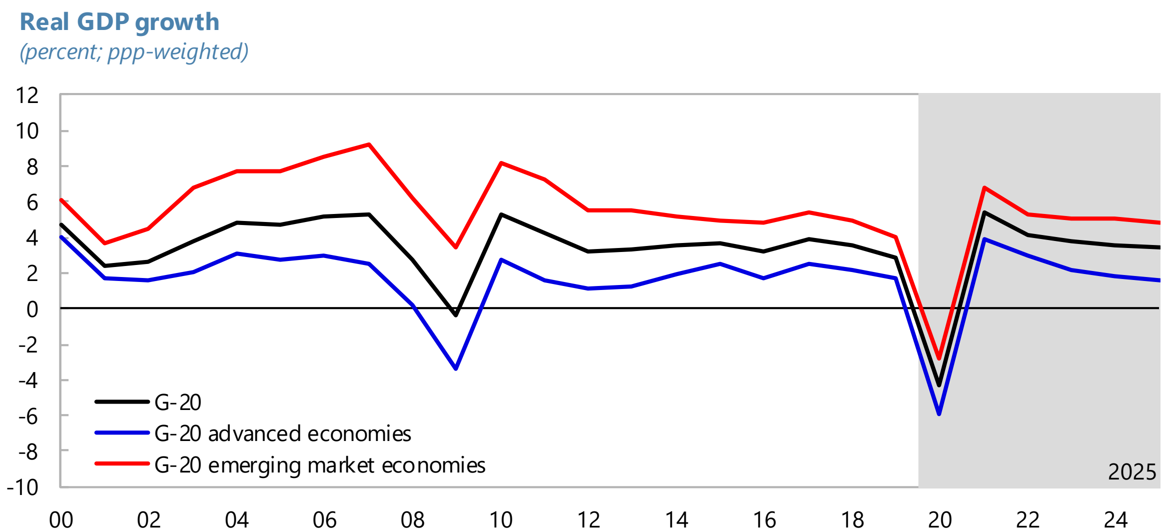
[1] IMF and OECD recommendations are based on priorities for additional reforms (relative to reforms already incorporated in the baseline), aggregated based on a simple rule. For example, a “high” priority rating requires that both IMF and OECD staff found reforms in a certain area to be very urgent.

Annex II. Supplementary Charts

1. This annex presents statistics on Strong, Sustainable, Balanced, and Inclusive Growth (SSBIG). The indicators for SSBIG correspond to those described in Annex I: (i) strong growth; (ii) sustainable growth; (iii) balanced growth; and (iv) inclusive growth. Data are mainly from the October WEO database, complemented with other sources where needed and as specified in footnotes to the charts. Aggregates include the European Union, unless otherwise specified.

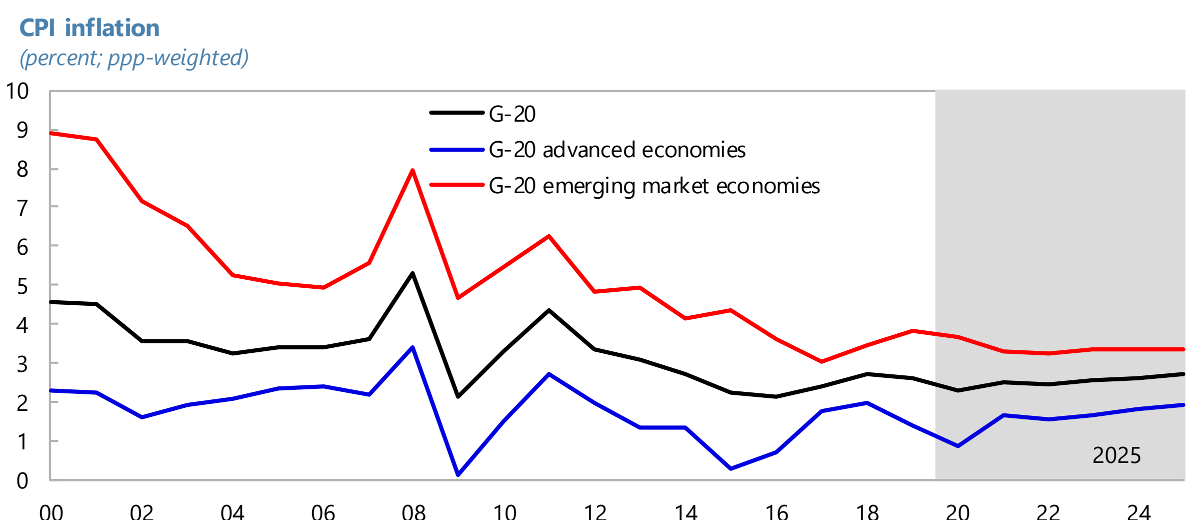
A. Dimension: Strong Growth

Figure AII.1. Real GDP Growth, 2000–25



Sources: IMF, *World Economic Outlook*; IMF staff calculations.

Figure AII.2. Inflation, 2000–25

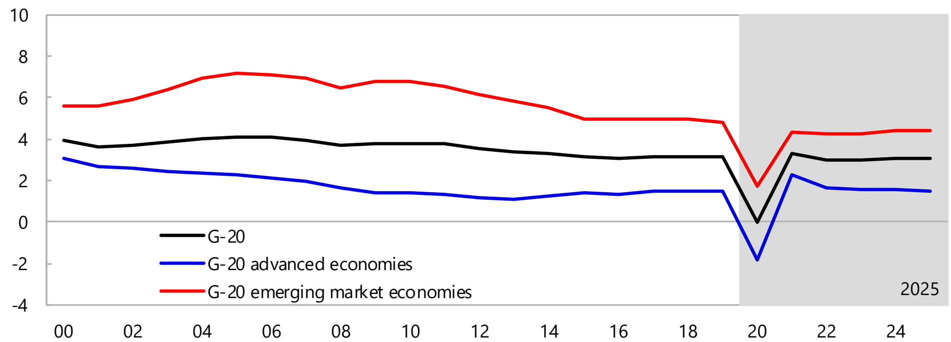


Sources: IMF, *World Economic Outlook*; IMF staff calculations.

B. Dimension: Sustainable Growth

Figure AII.3. Potential Growth, 2000–25

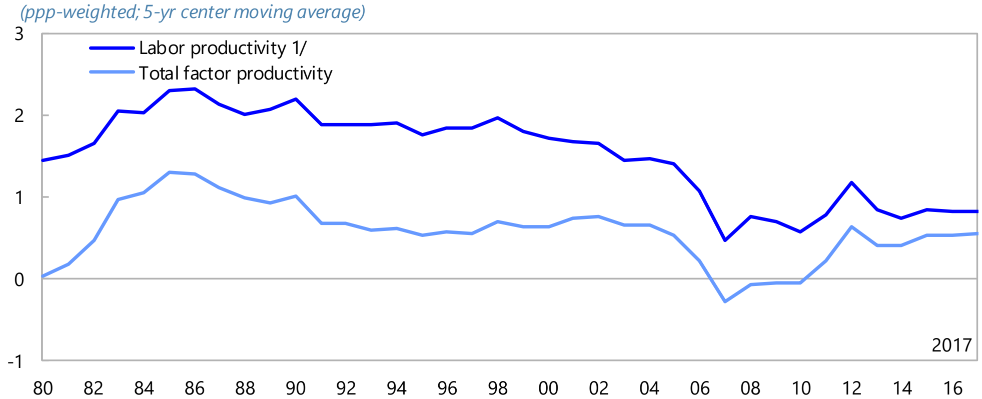
Potential output growth 1/
(percent; ppp-weighted)



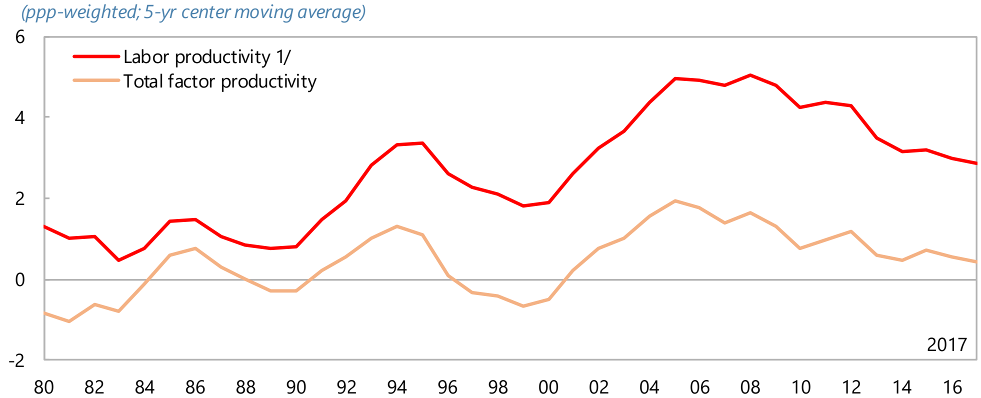
Sources: IMF, *World Economic Outlook*; IMF staff calculations.
1/ SAU: not included due to data limitations.

Figure AII.4. Productivity Growth, 1980–2017

Productivity growth: Advanced economies 2/
(ppp-weighted; 5-yr center moving average)



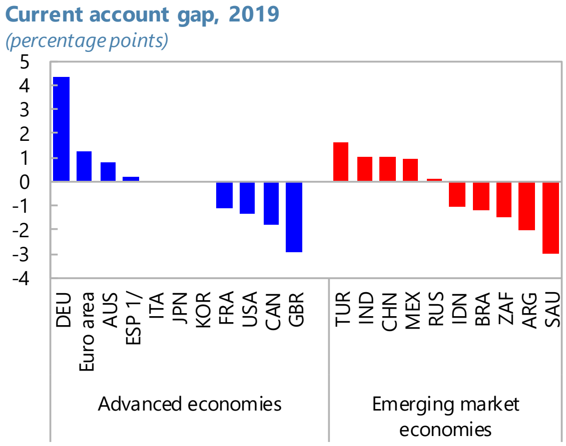
Productivity growth: Emerging markets 3/
(ppp-weighted; 5-yr center moving average)

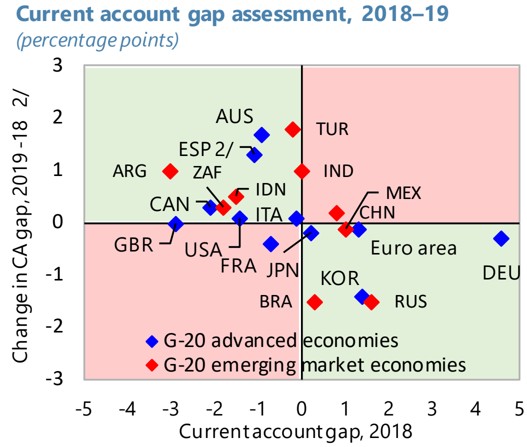


Sources: Feenstra, Robert C., Robert Inklaar and Marcel P. Timmer (2015), "The Next Generation of the Penn World Table" American Economic Review, 105(10), 3150-3182, available for download at www.ggdc.net/pwt; IMF, *World Economic Outlook*; IMF staff calculations.
1/ Labor productivity is calculated as real GDP per person employed. 2/ Includes ESP, but not other EU advanced economies due to data limitations. 3/ Excludes RUS, SAU, and other EU emerging market economies due to data limitations.

C. Dimension: Balanced Growth

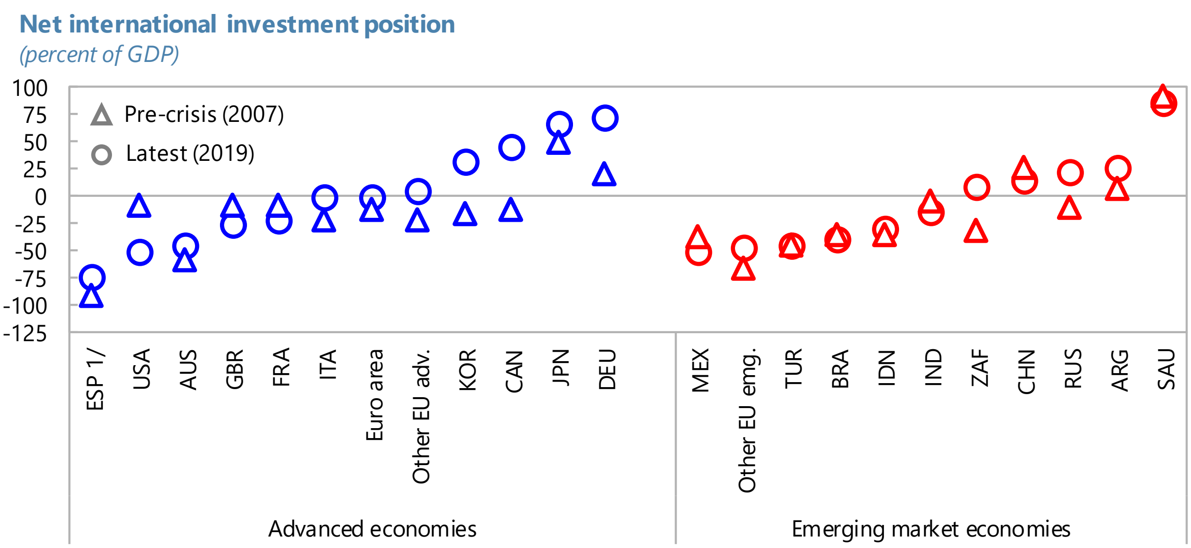
Figure AII.5. Current Account Gaps, 2018-19





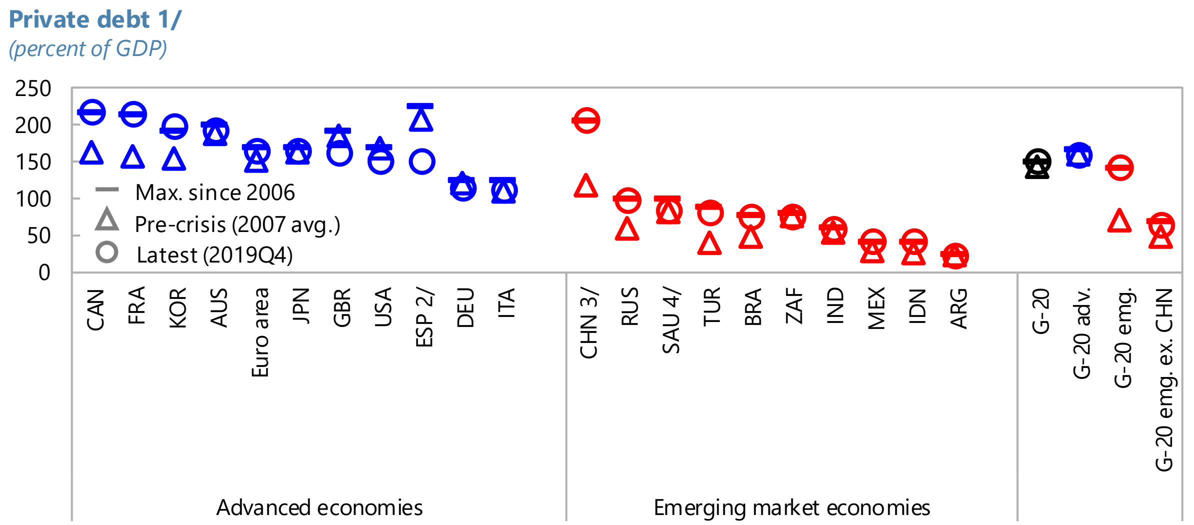
Source: IMF, External Sector Report, 2020.
1/ ESP is a permanent invitee.
2/ CA denotes the current account. Gaps are relative to IMF staff assessed current account norms.

Figure AII.6. Net International Investment Positions, 2007–19



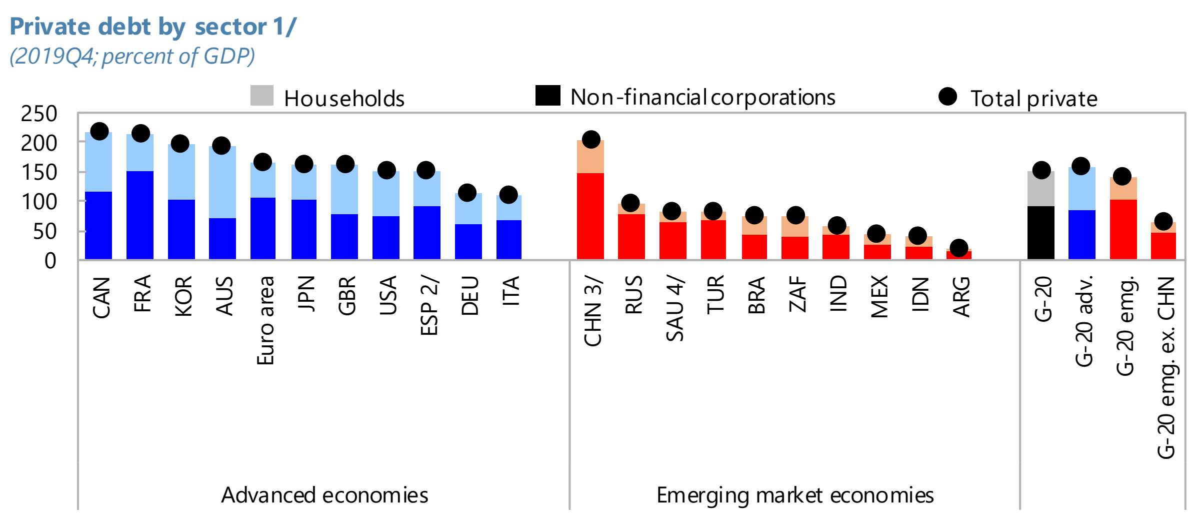
Sources: IMF, *Balance of Payments Statistics*; IMF, *World Economic Outlook*; IMF staff calculations.
1/ ESP is a permanent invitee.

Figure AII.7. Private Non-Financial Sector Debt, 2006–19



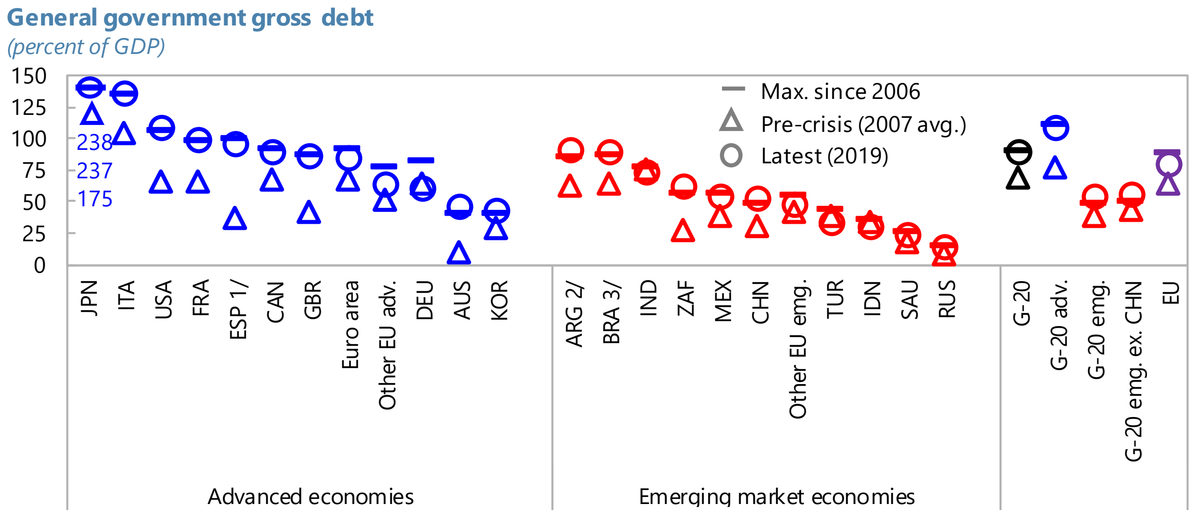
Sources: BIS; Haver Analytics; IMF, *World Economic Outlook;* IMF staff calculations.
1/ Credit to the private non-financial sector, which includes borrowing by non-financial corporations and households and reflects lending by domestic and foreign banks, as well as holdings of debt securities.
2/ ESP is a permanent invitee.
3/ CHN: private debt includes local government financing vehicles (LGFV) debt.
4/ SAU: data expressed in percent of non-oil GDP.

Figure AII.8. Private Non-Financial Sector Debt by Sector, 2019



Sources: BIS; Haver Analytics; IMF, *World Economic Outlook;* IMF staff calculations.
1/ Credit to the private non-financial sector, which includes borrowing by non-financial corporations and households and reflects lending by domestic and foreign banks, as well as holdings of debt securities.
2/ ESP is a permanent invitee.
3/ CHN: private debt includes local government financing vehicles (LGFV) debt.
4/ SAU: data expressed in percent of non-oil GDP.

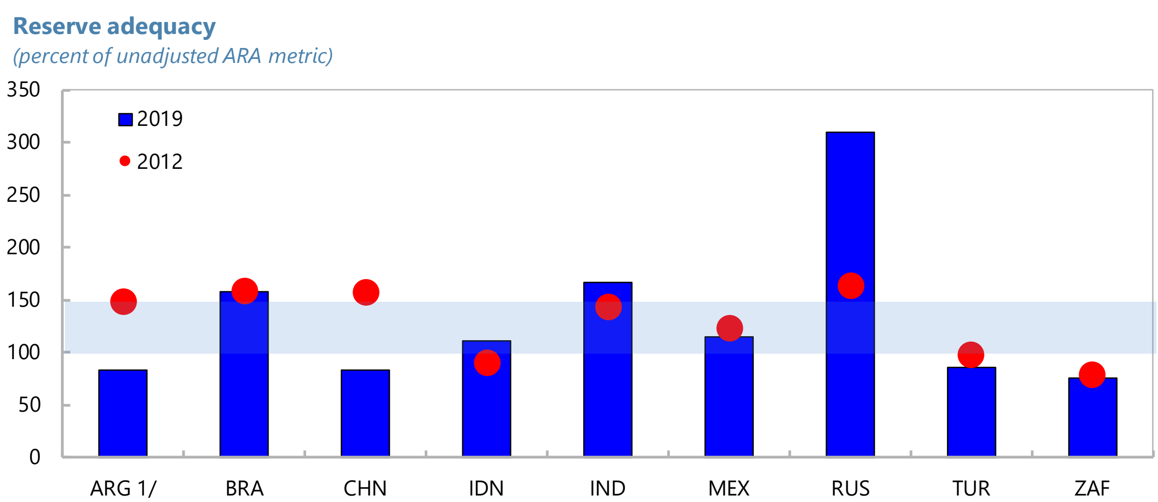
Figure AII.9. Public Sector Debt, 2006–19



Sources: IMF, *World Economic Outlook;* IMF staff calculations.
1/ ESP is a permanent invitee.
2/ BRA: general government data refer to the nonfinancial public sector.
3/ ARG: data cover federal government gross debt in percent of GDP.

International Reserves

Figure AII.10. Reserve Adequacy in Emerging Market Economies, 2012–19

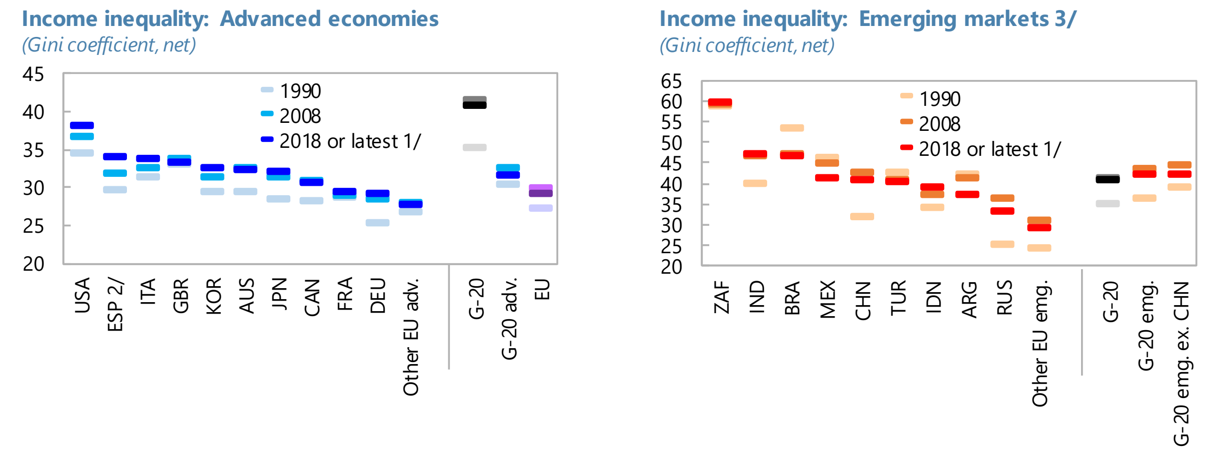


Source: IMF, Assessing Reserve Adequacy.
Note: Shaded area reflects the range within which reserves are assessed as broadly adequate based on the IMF composite Assessing Reserve Adequacy (ARA) metric. See IMF, 2015, "Assessing Reserve Adequacy—Specific Proposals".
1/ ARG: dot represents 2009 data.

D. Dimension: Inclusive Growth

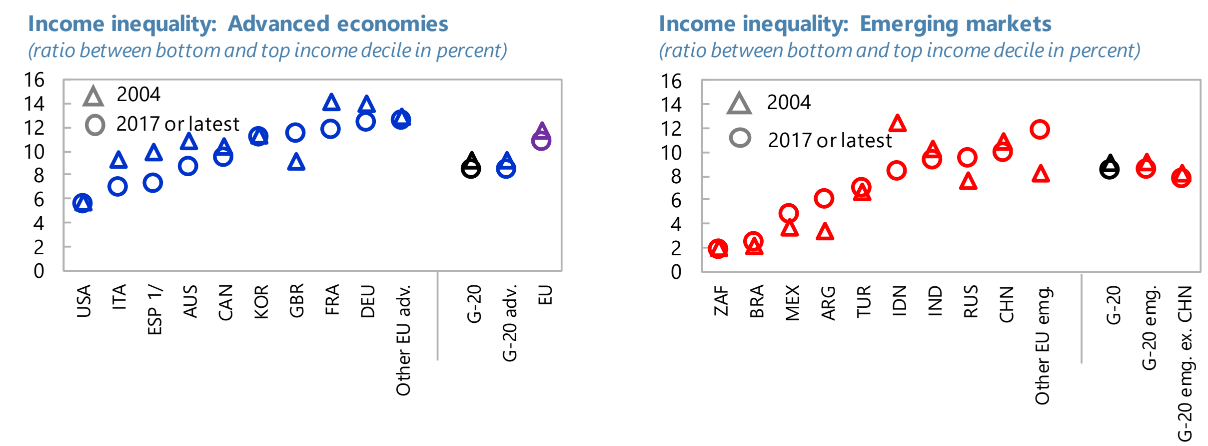
Income Inequality

Figure AII.11. Income inequality by Gini Coefficient, 1990–2018



Sources: Solt, F., 2020, The Standardized World Income Inequality Database, SWIID Version 8.3, May 2020; IMF staff estimates.
Note: Only countries with both 1990 and 2017 data are included in the aggregations.
1/ FRA, DEU, ITA, KOR, USA, ESP, ARG, CHN: latest data are from 2017; IND: from 2012; JPN and ZAF: from 2015; GBR: from 2019; IDN: from SWIID Version 7.1, August 2018.
2/ ESP is a permanent invitee.
3/ SAU: Excluded due to data limitations.

Figure AII.12. Income inequality by Income Decile, 2004–17



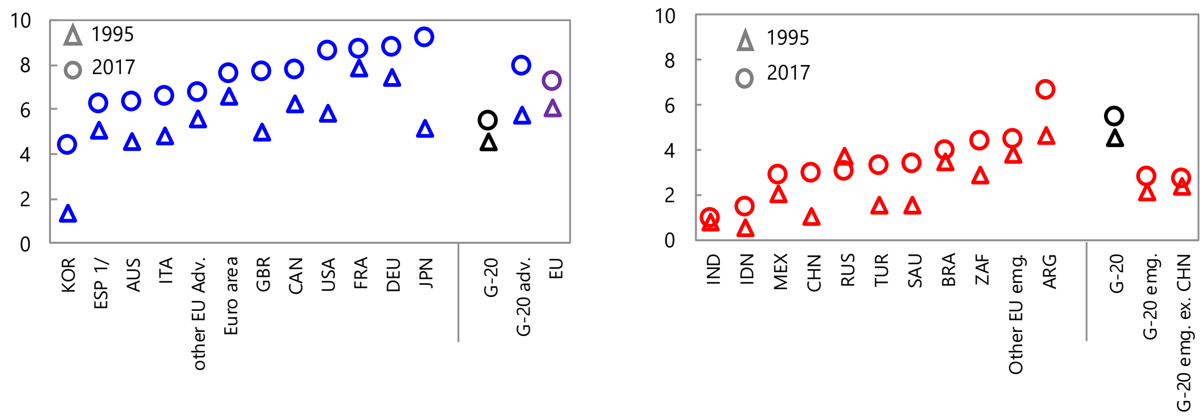
Sources: UNU-WIDER, World Income Inequality Database (WIID), May 2020; IMF, *World Economic Outlook;* IMF staff calculations.
Note: Given data limitations, different concepts and coverage to assess inequality are used across countries: CHN, IDN, IND: Resource concepts – consumption, area coverage – urban; RUS, ZAF, TUR: resource concepts – consumption, area coverage – all; Other countries: resource concepts – (net/ gross) income, area coverage – all. When 2004 numbers are not available, the following are: AUS: 2003; CHN, IND, ZAF: 2005; KOR: 2006. When 2017 numbers are not available, the following are used: AUS: 2014; IND, KOR: 2012; CAN: 2013; FRA, DEU, ITA, GBR, ESP, CHN, RUS, ZAF: 2015; TUR, MEX, USA: 2016. No data availability for JPN, and SAU.
1/ ESP is a permanent invitee.

Health and Education Spending

Figure AII.13. Public Health Expenditures, 1995–2017

Public health expenditures: Advanced economies *(percent of GDP)*

Public health expenditures: Emerging market economies *(percent of GDP)*

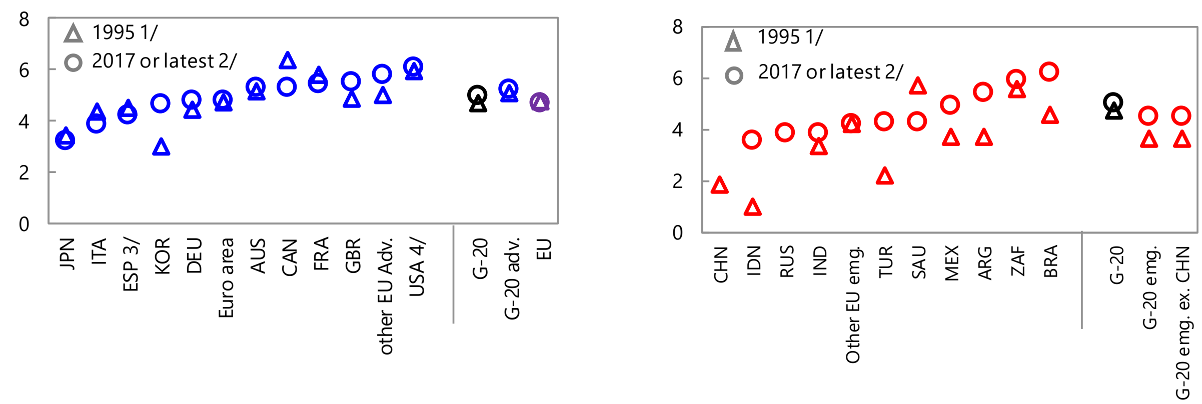


Sources: IMF, *World Economic Outlook;* World Bank, World Development Indicators; IMF staff calculations.
1/ ESP is a permanent invitee.

Figure AII.14. Public Education Expenditures, 1995–2017

Public education expenditures: Advanced economies *(percent of GDP)*

Public education expenditures: Emerging market economies *(percent of GDP)*



Sources: IMF, *World Economic Outlook;* World Bank, World Development Indicators; OECD; Kingdom of Saudi Arabia, Ministry of Finance; IMF staff calculations.
1/ IND: earliest data are from 1997; ARG and ZAF: from 1996; RUS: no data for 1995.
2/ CAN: latest data are from 2011; IND: from 2013; BRA, IDN, RUS: from 2015; AUS, DEU, ITA, JPN, KOR, GBR, ESP, MEX, ZAF: from 2016; and CHN: no data for 2017.
3/ ESP is a permanent invitee.
4/ Data are from the OECD database.

Annex III. Simulations: Impact of Reform Recommendations

1. This annex describes how the impact of implementing recommended structural reforms is estimated. The impact on Strong Sustainable, Balanced, and Inclusive Growth is computed using the IMF's G-20 model.[1] The model evaluates the economic impact of implementing the recommended reforms in a dynamic general equilibrium setting.

2. The simulations assume that recommended reforms are gradually implemented over 10 years, starting in 2020.

- *Magnitude*. The magnitude of the changes in the structural reform indicators is based on historical episodes of major reforms, with the speed of implementation reflecting the behavior exhibited by G-20 countries in the implementation of their growth strategies so far.
- *Recommendations*. Policy recommendations are expressed in terms of reform priorities: "high" priority reforms are implemented as ¾ of the historical magnitude of major reforms; "medium" priority reforms as ½ of the historical magnitude; and "low" priority reforms as ⅓ of the historical magnitude. Reform priorities reflect a consensus assessment by IMF and OECD staff.
- *Quantification*. The quantitative evaluation of the impact of structural reforms on productivity and labor markets is based on a series of OECD analytical papers.[2]

[1] Andrle, M., P. Blagrave, P. Espaillat, K. Honjo, B. Hunt, M. Kortelainen, R. Lalonde, D. Laxton, E. Mavroeidi, D. Muir, S. Mursula, and S. Snudden, 2015, The Flexible System of Global Models – FSGM, IMF Working Paper No. 15/64.

[2] Examples include Egert, B. and P. Gal, 2017, The Quantification of Structural Reforms in OECD Countries: A New Framework, OECD Economics Department Working Paper No. 1354; Bouis, R. and R. Duval, 2011, Raising Potential Growth After the Crisis: A Quantitative Assessment of the Potential Gains from Various Structural Reforms in the OECD Area and Beyond, OECD Economics Department Working Papers No. 835.

Annex IV. G-20 Indicative Guidelines

1. This Annex presents the update of the G-20 Indicative Guidelines, following the methodology agreed by the G-20 in April 2011. The G-20 methodology assesses a set of indicators mechanically, without normative implications, against reference values.[1] This assessment is then used to identify members with large imbalances that would require further analysis under the sustainability updates of the G-20 Mutual Assessment Process (MAP). In light of the current crisis, outcomes of the assessment can be challenging to interpret.

2. The Indicative Guidelines use indicators across three broad areas to evaluate "imbalances," defined as deviations of indicators from their reference values (see below). These indicators include (i) the external position, comprising the trade balance, net investment income flows, and transfers; (ii) public debt and fiscal deficits; and (iii) private saving and private debt. The indicators are based on average projected values for 2022–24 from the IMF's June 2020 WEO Update, except for private debt, where the latest available data are used.

3. Reference values, against which the indicators are compared, are derived from four approaches. The four approaches cover (i) a structural approach based on economic frameworks to calculate "norms" (e.g., for the external position, the norm is based on staff's ESR methodology); (ii) a time series approach to provide historical trends; (iii) a cross-section approach to identify benchmarks based on averages of countries at similar development stages; and (iv) a quartile analysis to provide median values for the full G-20 distribution.

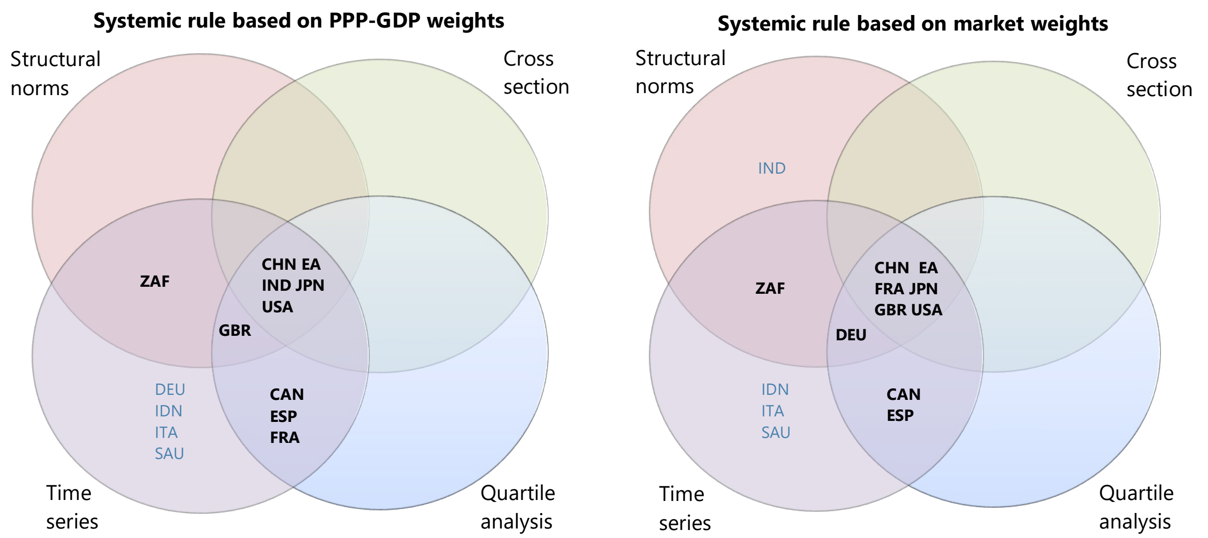
4. Selection criteria are used for determining countries with relatively large deviations. Members are selected if at least 2 of the 4 approaches show "large" deviations of indicators from their reference values in 2 out of 3 sectors (external, public, and private). For "systemic" economies (i.e., those whose share in total G-20 GDP is 5 percent or more), a "moderate" deviation is used for selection to account for their systemically important roles.

5. The methodology identifies 11 economies as having relatively large deviations, which would have warranted an in-depth analysis under the G-20 MAP sustainability updates (Figure AIV.1). Relative to the 9 countries identified last year, *Canada* and *South Africa* are now also flagged. The main sectoral sources of deviations for the various economies are *Canada* (external, public debt, and private imbalances); *China* (external, fiscal deficits, public debt, and private imbalances); *euro area* (external, public debt, and private imbalances); *India* (external, fiscal deficits, public debt, and private saving imbalances); *Japan* (external, fiscal deficits, public debt, and private saving imbalances); *South Africa* (external, fiscal deficits, public debt, and private saving imbalances); *United Kingdom* (external, fiscal deficits, public debt, and private imbalances); *United States* (external, fiscal deficits, public debt,, and private saving imbalances); *France* (external, fiscal deficits, public debt,, private debt imbalances);

[1] The approach and indicators used are specific to the Indicative Guidelines methodology and are not necessarily the same as those used elsewhere in the G-20 Report on Strong, Sustainable, Balanced, and Inclusive Growth.

Germany (external, public debt, and private saving imbalances); and *Spain* (external, fiscal deficits, public debt, and private imbalances).

Figure AIV.1. Indicative Guidelines: Comparison of Approaches, 2020



Sources: IMF, *World Economic Outlook*, June 2020; IMF staff calculations.
Note: In the left-hand chart, a country is considered systemic if the PPP-GDP weight in G-20 PPP-GDP is larger than 5 percent. In the right-hand chart, the corresponding selection of systemic countries is based on nominal GDP weights. Selection in each of the two charts is based on four different approaches: (i) structural norms; (ii) cross section; (iii) time series; and (iv) quartile analysis. Members are selected if at least two of the four approaches show "large" imbalances. Black and bold indicate selected countries. ESP is a permanent invitee.

Annex V. Growth in and Around a Typical Recession

1. This Annex provides details on the construction of a "typical" recession cycle. The dataset is constructed from the OECD Historical Quarterly National Accounts database. All variables are expressed in real terms (national currency, volume estimates) and are seasonally adjusted.

2. For each country, we identify cyclical peaks and troughs using a Bry-Boschan Quarterly (BBQ) algorithm. The minimum length of the cycle is set to 5 quarters. For each recession episodes, only observations that range from 8 quarters before the peak to 11 quarters after the trough are retained. Growth rates are calculated as quarterly log-changes in the variable, expressed in percent. Pre-recession GDP (expenditure side) trend growth rates are defined as average GDP growth rates over the first four quarters of the retained observations. For each episode, growth rates of all variables are computed as deviations from this episode-specific GDP trend growth.

3. The average peak-to-trough duration of the episodes is 4 quarters. This implies that, on average, the peak of a cycle occurs during quarter -4 relatively to the trough (quarter 0). The (detrended) growth rate of a variable over a peak-to-trough period longer or shorter than 4 quarters is transformed to make it fit exactly a four-quarter window. For instance, if the peak to-trough duration of an episode is 8 quarters, then cumulative growth rates are calculated, respectively, over the post-peak quarters 1 and 2, 3 and 4, 5 and 6, 7 and 8. The resulting four cumulative growth rates are then artificially assigned to quarters -3, -2, -1 and 0 respectively. If instead the peak to-trough duration of an episode is 2 quarters, then the growth rate during the first post-peak quarter is divided by two and is artificially assigned to quarters -3 and -2. Similarly, the second post-peak quarter is divided by two and assigned to quarters -1 and 0. In the same spirit, a specific algorithm (available upon requests) treats the cases where the peak-to-trough duration is not an exact multiple or fraction of 4.

4. All episodes are then pooled and "quarterly" averages and standard deviations are calculated for each quarter. Each episode has the same number of quarters (8 quarters before the peak, 4 recession quarters, 11 quarters after the trough). To abstract from cyclical patterns during the Global Financial Crisis (see discussion below), only episodes with GDP peak before 2007Q1 are considered. This leaves us with 138 recession episodes starting in the '60 and spanning 37 countries.

5. Three features of a typical recession emerge.

- *Hysteresis*. A recession causes permanent output losses (integral of the line in the figure).
- *No super-hysteresis*. Growth rates eventually go back to their pre-recession trend.
- *No significant pre-crisis "boom" or post-crisis "pent-up demand"*. Only during the peak quarter (-4) do we observe some above-trend growth. Similarly, only during the first two post-trough quarters (+1 and +2) do we observe some above-trend growth, which however is attributed to the external sector and is due to a sharp post-trough improvement in export growth combined with a delayed pick-up in import growth.

6. These findings are robust to including the post-2007 recession episodes in the sample. However, when we focus on recessions with peaks between 2007Q1 and 2009 Q4 (charts are available upon request), one specific feature emerges: Global Financial Crisis recessions were accompanied by super-hysteresis, as post-trough growth rates were persistently below pre-crisis trends.