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BACKGROUND PAPER

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The IMF's Forecasting and Policy Advice Formulation Processes During the Pandemic

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The IMF's Forecasting and Policy Advice Formulation Processes During the Pandemic[*]

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The views expressed in this Background Paper are those of the authors and do not necessarily represent those of the IEO, the IMF, or IMF policy. Background Papers report analyses related to the work of the IEO and are published to elicit comments and to further debate.

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ABBREVIATIONS

AE	Advanced Economy
CFM	Capital Flow Management Measure
CSO	Civil Society Organization
EM	Emerging Market
EMDE	Emerging Market and Developing Economy
FAD	Fiscal Affairs Department (IMF)
FM	Fiscal Monitor
GDP	Gross Domestic Product
GEP	Global Economic Prospects (World Bank)
GFC	Global Financial Crisis
GFSR	Global Financial Stability Report
LIC	Low-Income Country
MCM	Monetary and Capital Markets Department (IMF)
MD	Managing Director of the IMF
RES	Research Department (IMF)
SPR	Strategy, Policy, and Review Department (IMF)
WEO	World Economic Outlook

EXECUTIVE SUMMARY

This paper describes and evaluates the IMF's processes for formulating the outlook and providing policy advice during the pandemic. Key findings are as follows:

Rapid revisions of forecasts and increased top-down guidance. Fund staff quickly revised their global economic outlook, consulting with epidemiologists and health experts on the likely duration and spread of the pandemic. There was greater recourse to top-down guidance to ensure shared assumptions about the duration and economic impact of the pandemic, but staff generally did not feel that it hindered their ability to adjust forecasts for country circumstances.

Pessimism in June 2020 growth forecasts. In contrast to fears expressed by outside observers that the IMF's forecasts were too rosy, the IMF's June 2020 forecasts ended up being much more pessimistic than the eventual outcome, which was also the case with private sector Consensus Forecasts though not to the same extent. In our view, the pessimism resulted from staff's attempt to best reflect the information on hand at the time rather than a deliberate attempt to make a dire forecast or a result of increased top-down guidance.

Surge in 2021 inflation missed. A bigger forecast miss was the failure to catch the sustained surge in inflation starting in 2021, flagged as a concern by some outside experts by spring 2021. Staff accurately forecast that 2020 inflation would be subdued due to weak demand, but this judgment—which could partly reflect Fund deference to conventional wisdom among major central banks—proved off the mark in the face of increased effects of supply disruptions and additional demand stimulus in early 2021.

Fiscal policy advice. The Fund quickly urged countries to "spend but keep the receipts." The Fund's advice was bold, appropriate for the circumstances, clearly communicated, and avoided past mistakes. The Fund's guidance was made with awareness of future risks and after internal consultation and Board review. While staff emphasized that support should be temporary and targeted, some authorities found the Fund's overall message on fiscal policy too broad-brush.

Monetary policy advice. The Fund broadly supported the stimulative policies adopted by central banks in advanced economies (AEs) and emerging markets (EMs). While internally debating the pros and cons of the use of unconventional monetary policies by EMs, the Fund refrained from a strong and timely public stance; some policymakers and market participants would have welcomed more public engagement by the Fund on a major new monetary policy development.

Advice on dealing with capital outflows. The Fund appropriately refrained from public comment on the use of capital flow management measures during the months of sharp outflows from EMs and low-income countries (LICs) at the start of the pandemic, while being more open internally to supporting use of such measures should the situation continue to deteriorate.

Policy tracker and policy guidance notes. The IMF deserves much credit for launching a widely appreciated policy tracker to share information on policies put in place by governments. The Fund also produced an extensive series of "How-To" notes; country teams and authorities greatly appreciated these, while noting that some could have provided more granular policy guidance.

I. INTRODUCTION

1. **New challenges to forecasting.** Even for an institution used to the perils of macroeconomic forecasting during crises, the pandemic presented new challenges in assessing the global and country outlooks. The underlying source of the crisis was not the economic and financial shocks with which the IMF has great familiarity. And while the IMF is not a stranger to having to forecast the effects of health-related crises, the scale of the global pandemic dwarfed those earlier crises. Moreover, there was a strong interest in the Fund providing a rapid reassessment of the outlook in the face of a highly uncertain course for the pandemic.

2. **Policy advice for novel situations.** Guided by its forecasts of the economic outlook, the IMF also had to calibrate its policy advice to a situation where governments faced difficult tradeoffs on how to protect lives without undue damage to livelihoods. At a time when debt burdens in many countries were already a concern, the IMF had to decide on the broad approach to fiscal policies to recommend to its member countries that would stand them in good stead not only through the pandemic but in the recovery period. In its monetary policy advice, the Fund had to assess the risks to inflation and the financial system more broadly from the stimulative policies of central banks around the globe, including the adoption of unconventional monetary policies by a number of emerging markets and developing economies (EMDEs). These economies also faced sharp capital outflows in the early months of the pandemic, leading to questions from country officials and IMF country teams on the appropriate measures—including possibly capital flow management measures (CFMs)—to deal with the outflows (Batini, 2020).

3. **"How-To" notes and policy tracker.** The Fund normally supplements the broad strokes of the policy advice it provides in its multilateral surveillance reports with granular country-level advice in regular Article IV consultations. However, staff's work on these consultations was suspended at the onset of the pandemic. To some extent, the dissemination of such advice was taken up in a Special Series of COVID Notes (so-called "How-To" notes). In addition, the Fund launched a policy tracker to keep the international community informed of economic and financial policy actions being taken by member countries in response to the pandemic.

4. **Broad appreciation but also some concerns.** The IMF's assessments of the global economic outlook always receive a lot of attention from the international financial community and country authorities. The attention was heightened during 2020 by the strong interest in an informed coherent assessment of the economic and financial impacts of a global health shock and the appropriate national and global policy responses. While the Fund's updates to the outlook and its policy advice during the pandemic were broadly appreciated, and the policy trackers were generally considered a valuable source of information, there were, nevertheless, a number of concerns related to the Fund's activities that deserve analysis.

5. **Biases in IMF forecasts.** First, as during past recessions and crises, there were fears about potential biases in Fund forecasts.

- In May 2020, analysts at the Center for Global Development expressed concerns that the IMF's forecasts for 2020 growth in low-income countries (LICs) were too optimistic and speculated that the reason for this could be "political. If lower growth requires higher levels of financial resources to offset the shock in developing countries, and the IMF (and World Bank) feels unable and/or unwilling to galvanize those resources, it might lean toward raising the forecast in order to lower the financing requirement" (Sandefur and Subramanian, 2020a; 2020b). Similar concerns that IMF forecasts for developing economies were too rosy surfaced in prominent media sources (for example, *The Economist*, August 4, 2020) and among civil society organizations such as the Bretton Woods Project (October 2020) and Jubilee Germany (Rehbein, 2020). *The Economist* noted that "rosy forecasts by the IMF and the World Bank can have serious consequences," by leading to misguided policy choices by governments.

- In contrast, some country authorities expressed concerns that IMF forecasts for EMDEs were too pessimistic. The most contentious case was that of Brazil, where officials complained publicly about overly pessimistic IMF forecasts for their country's growth in Brazil, particularly for 2020 (*Financial Times*, December 16, 2021). Relatedly, some have expressed concern that the IMF's view of the economic impact of lockdowns and other health interventions were too top-down and did not take adequate account of cross-country variations, particularly differences between advanced and developing economies.

6. **Fiscal policy advice.** Second, the IMF's advice specifically on fiscal policies has been questioned from different perspectives. Interviews reveal that some country authorities found the IMF's fiscal policy advice—which they characterized as "spend, spend, spend"—as not suitable to their situations which required fiscal discipline to ensure debt sustainability. At the same time, civil society participants were supportive of the general exhortation but felt that this rhetoric at the corporate level was not reflected in the IMF's country advice, particularly in countries seeking IMF financial support.

7. **Quality of surveillance.** Third, there was a general concern that the postponement of work on Article IV consultations and streamlined review procedures reduced attention to providing country-specific advice on addressing the economic consequences of the pandemic. While staff maintained an active virtual engagement with country authorities, and the "How To" notes provided additional guidance on several topics with which authorities were grappling during the pandemic, there were questions about whether these alternate forms of engagement provided sufficiently tailored guidance.

8. **Evaluation questions.** It is too early to make a definitive evaluation of all aspects of the IMF's economic assessment and policy guidance during the pandemic. Nevertheless, this paper offers preliminary analysis that may be useful to address some of the concerns discussed above. Specifically, the paper tackles the following questions:

- How effectively did the Fund adapt its processes for assessing the economic outlook and absorb lessons from previous assessments of its forecast processes? Was the Fund's assessment timely and how well did it handle the inherently large degree of uncertainty? How did Fund forecasts for 2020 and 2021 compare with outcomes and with forecasts from other sources?

- How open was the Fund to adapting its standard policy advice on fiscal and monetary policies and on policies to deal with capital outflows to the challenges its member countries were facing during the pandemic?

The paper also provides a brief discussion of how well the "How-To" notes and policy tracker served the membership during a time when work on some of the normal means of surveillance—particularly the Article IV consultation—were suspended.

9. **Evaluation methods.** The assessment in this paper is based on desk review of documents, particularly the IMF's flagship multilateral surveillance reports; interviews with staff involved in the formulation of the global outlook and external experts on forecast assessment; interviews with staff involved in the formulation of IMF policy advice, selected country authorities, academic experts and private sector participants, and external stakeholders such as civil society organizations (CSOs).

10. **Structure of the paper.** Section II provides a description and assessment of the forecasting process, Section III of the policy formulation process, and Section IV of the "How-To" notes. Conclusions are in Section V.

II. Assessment of IMF Forecasting Process

A. Evolution of IMF Forecasts and Outlook

11. **The IMF's forecasting process.**[1] The IMF's forecasts are reported through its flagship publication, the World Economic Outlook (WEO), issued in April and October each year, with two updates in January and July. The process is generally kicked off by a memorandum from the Research Department (RES) to country desks with assumptions about commodity prices, interest rates and growth in the major economies. Additionally, RES periodically issues forecasts from its models , which aims to highlight key issues and risks in the IMF forecasts. At the start of the pandemic, RES made these model forecasts using the Global Projection Model (GPM) (described

[1] The 2014 IEO evaluation of IMF forecasts (IEO, 2014a) describes the WEO's forecasting process in detail.

in Carabenciov and others (2013)). From the June 2020 WEO onwards, RES made forecasts using a combination of its G20 model (described in Andrle and others, 2015) and a new pandemic-based sectoral impact framework. Desks combine the "top-down" guidance from RES with their "bottom-up" knowledge of specific country characteristics and current circumstances. The forecast eventually released in the WEO reflects a balancing of top-down discipline and country-specific information.

12. **Forecasting the effects of a pandemic.** When the January 2020 WEO update was released, the risks to the outlook from the pandemic were not yet on the Fund's radar: there is no mention of the pandemic and the main risk to the forecasts highlighted was an escalation of the US-China trade war.[2] Over the course of February 2020, however, it became clear that the effects of the pandemic would have to be taken into account in the WEO forecasts for April. Over this time, as described in greater detail in the background paper by Ocampo and others (2023), the macro risk group of the IMF's Strategy, Policy and Review (SPR) department had become increasingly alarmed about the likely spread and effects of the pandemic. Likewise, RES urged country desks to think actively about the impacts on the global and country outlook. The February 26, 2020 memorandum from RES providing guidance on global assumptions for the April 2020 WEO asked country desks to note the revision to the growth forecast for China as a result of the pandemic and to consider not just the "external demand shock" from this development but also "other spillovers from China, including via supply chain disruptions." Desks were "urged to be conservative in their assessment of aggregate demand," since "with the virus spreading beyond the Asia-Pacific region, further forecast downgrades are very likely."

13. **Increased top-down guidance.** In an environment where information about the spread and likely impact of the pandemic was changing almost daily, the February 26 memorandum had to be superseded by a further set of instructions:

- On March 4, 2020, providing increased top-down guidance, following discussion among RES, SPR and the IMF's area departments. The document noted that "based on RES/SPR conversations with leading epidemiologists in the past 3–4 days, there is consensus among the experts that the pandemic would spread to nearly every country over the coming months," and that "in turn, this is likely to imply a notable hit to domestic activity." This was a week before the World Health Organization had declared COVID a worldwide pandemic. Going beyond the top-down guidance typically provided, the documents provided "a common set of assumptions about domestic disruptions for all desks to incorporate in their baseline." Specifically, all desks were asked to assume that that the disruption would be concentrated in the second quarter of 2020, "with a recovery thereafter" and that China's 2020 GDP growth would be lower than previously forecast by -1.5 percentage points (before policy support).

[2] The World Bank's January 2020 Global Economic Prospects report also did not mention the pandemic.

- On March 18, RES circulated a further "update to the final assumptions," which suggested even larger downward revisions to growth forecasts. It said that for China, the US, UK and Euro Area-4, the disruption "on average subtracts 4½ percentage points from annual growth relative to the January WEO Update." It urged that EM country desks should consider making cuts "as least as large" for those for the advanced economies (AEs).

The forecasts released in the April 2020 WEO reflected this guidance. At this time, the Fund's baseline forecast was for about a 3 percent decline in world output in 2020.

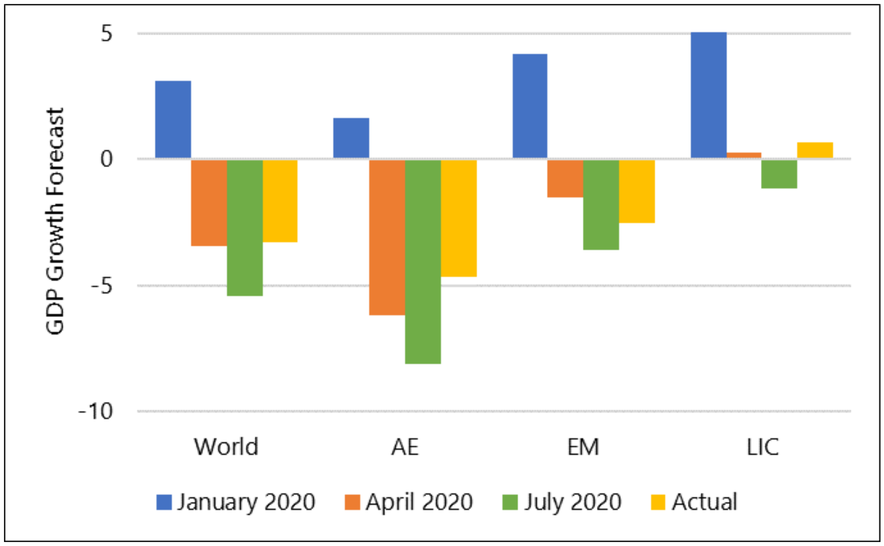
14. **Zig-zag in the IMF's 2020 global growth outlook.**

- *Pessimism in June 2020 forecasts:* In May, the pandemic's impacts in the AEs led to further downward revisions in growth forecasts, particularly for the G-7 economies. RES's May 2020 memorandum on global assumptions shared these revisions with other country desks and urged them to similarly "consider projecting stronger hits" to economic activity in their countries. Hence, by the time of the summer 2020 WEO update—released a month earlier than normal in June in light of the fast-moving situation—the Fund was considerably more pessimistic than in April and projected nearly a 5 percent decline in world output in 2020.

- *Recalibration in October 2020 forecasts:* Over the coming months, however, even as the pandemic exerted a heavy death toll, its economic impact on the AEs—as reflected in high-frequency economic activity indicators—appeared less severe than expected. RES's guidance to country desks in preparation for the October WEO was to "assume a gradual recovery" in the third quarter of 2020 and also to assume—based again on conversations with epidemiologists and experts at the World Health Organization—that the public health response would move from stringent lockdowns to ramped-up testing and tracing, thus mitigating the impacts on economic activity. Reflecting these developments and assumptions, the IMF's October 2020 global growth forecast dialed back the pessimism expressed in June. As Figure 1 shows, the pattern of forecast revision differed by country group. The pattern of revisions to the global growth forecasts described above was driven by AEs, while for emerging markets (EMs) and LICs forecast revisions between June and October 2020 were quite small.

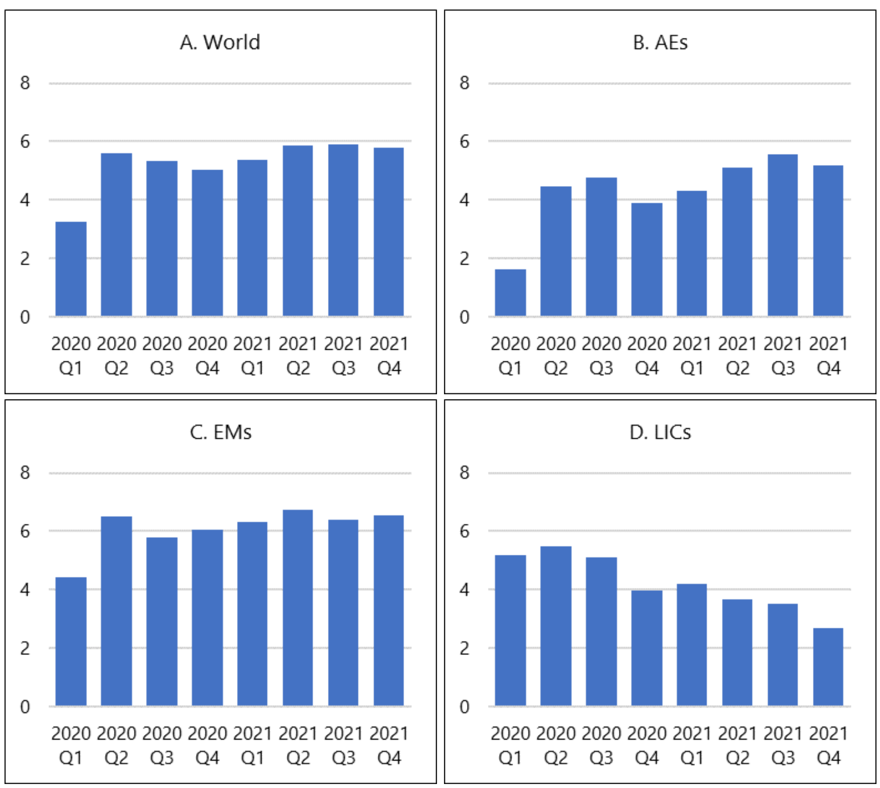
15. **Outlook for recovery.** Though the IMF forecast a global recession for 2020 in its April 2020 forecast, its projection at the time was that recovery would have arrived by 2021 in the sense that growth would be positive, even if in level terms there would still be a sizeable output gap. Though the IMF's forecasts for 2020 grew more pessimistic in July 2020, the weakness was not expected to continue into the following year and the Fund's forecast for 2021 assumed that global growth would have rebounded to 6 percent (Figure 2). Subsequent editions of the WEO have recalibrated this projection but the changes have been small, particularly for the AE and EM country groups. For LICs, the pattern was different: forecasts for 2021 had been almost steadily marked down, reflecting the greater constraints in their policy responses and in accessing effective vaccines.

Figure 1. Forecasts for Growth in 2020—World and Country Groups



Sources: IMF WEO; IEO calculations.
Notes: Aggregates are constructed using GDP weights (PPP-based) for countries.

Figure 2. Forecasts for Growth in 2021—World and Country Groups
WEO-GDP growth 2021 forecast (January 2020–October 2021)



Sources: IMF WEO; IEO calculations.

16. **Scenario analysis.** Recognizing the extreme uncertainty associated with the baseline forecasts during the pandemic, all WEO editions since April 2020 have provided extensive scenario analysis, almost always presented in a special "Scenario Box." In addition to a qualitative discussion of various sources of risks to the outlook, the scenario analysis provides quantitative estimates of likely outcomes relative to the baseline under an upside and downside scenario using the staff's G20 model. For instance, even as the IMF's baseline forecast for 2020 growth grew pessimistic, the June 2020 update discussed the upside risks from the possible "development of a safe, effective vaccine." The April 2021 WEO considered a downside scenario where supply bottlenecks in production and other logistical problems with delivering the vaccines would significantly delay reaching herd immunity.

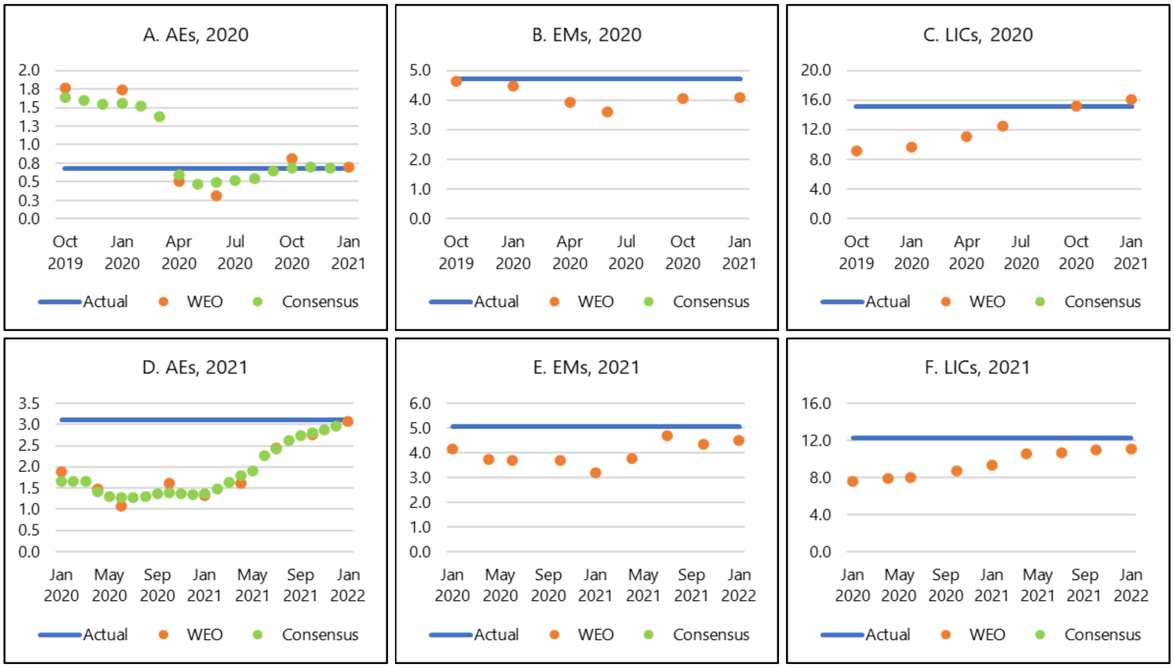
17. **Inflation forecasts for 2020.** In internal notes, staff debated whether "supply breakdowns combined with large fiscal deficits and monetary financing would lead to a resurgence of inflation," despite the collapse in demand. Staff reasoned that in AEs, the impact of the demand collapse would dominate and lead to a drop in inflation rates. In contrast, in developing economies, where some countries were "witnessing sharp currency depreciations and without well-anchored inflationary expectations, inflation may spike despite the collapse in demand." Staff turned out to be broadly accurate in this judgment as far as the forecasts for inflation for 2020 are concerned. Inflation fell in AEs and rose in LICs, on average by as much as staff's forecasts; inflation in EMs was not much affected on average (Figure 3, top panel).

18. **Inflation forecasts for 2021.** IMF staff expected that economic slack would persist throughout 2021, keeping a lid on prices despite ongoing bottlenecks in supply. The January 2021 WEO update argued that: "Even with the anticipated recovery in 2021–22, output gaps are not expected to close until after 2022. Consistent with persistent negative output gaps, inflation is expected to remain subdued during 2021–22." The April 2021 WEO also expected "inflation pressures to remain contained in most countries". Staff also argued that if output gaps were to be smaller than estimated, inflation would not rise much as Phillips Curves had become flatter over time.

19. **Inflation outcomes for 2021.** Inflation kicked up in many countries around the world in 2021, forcing a process of catch-up in IMF forecasts (Figure 3, bottom panel). In most AEs (such as the United States and Germany) and in many EMs (such as Brazil), inflation turned out to be much higher than expected, as the impact of supply bottlenecks combined with some recovery in demand in the context of continued macroeconomic policy support brought about a rapid acceleration in consumer prices.[3]

[3] In contrast, inflation was much lower than expected in some other economies, including China, Indonesia, and Japan.

Figure 3. Evolution of Inflation Forecasts for 2020 and 2021



Sources: Consensus Economics; IMF WEO; IEO calculations.

B. Assessment

20. **Pre-pandemic assessments of IMF growth forecasts.** The IMF's growth forecasts draw a lot of professional scrutiny. They are assessed periodically by external experts commissioned by RES (Timmerman, 2006; Celasun and others, 2021—which summarizes an external assessment carried out in 2016–17) and by other forecasting experts, and were also comprehensively assessed in a 2014 IEO evaluation and as part of the IMF's 2018 Review of Conditionality. While finding IMF's forecasts to be of high quality and comparable to private sector and other official sources, this work has also found some deficiencies, particularly a tendency towards optimism about growth:

- Optimism in Fund forecasts comes largely from two sources: (i) the inability to predict recessions; and (ii) the slow adjustment of forecasts during recessions. The former is understandable since recessions are often the consequence of events whose exact timing is difficult to anticipate, but the latter is less excusable. Studies have found that IMF staff, in common with other forecasters, have appeared reluctant to recognize the extent of recessions and made slow adjustment to their forecasts over the course of the year of the recession (IEO 2014; An and others, 2022).

- Forecasts displayed a bias toward optimism when countries were in IMF programs, particularly in high-profile exceptional access cases. IEO (2021) suggested that this reflected pressures doing program negotiations to agree on an outlook that showed a favorable growth response and was consistent with countries' debt sustainability.

- Some large forecast errors in the past had occurred as a result of the forecast process giving inadequate attention to evidence on fiscal multipliers (Blanchard and Leigh, 2010).

- IMF staff gave inadequate attention to medium-term forecasts and had less well-developed processes for these forecasts than for short-term forecasts (IEO, 2014a; Ho and Mauro, 2014).

21. **Assessment metrics:** In assessing the process for the formulation of IMF's forecasts during the pandemic, we consider the extent to which they avoided some of these past deficiencies, and the extent to which the concerns noted in the introduction materialized. We compare forecasts against outcomes and against other sources of forecasts, such as *Consensus Economics*—which compiles country forecasts largely from private sector sources—and the World Bank's *Global Economic Prospects* (GEP) which has gained in prominence over the past decade as a source of forecasts for developing countries. Comparing IMF forecasts during the pandemic to forecasts from these sources also provides some evidence on whether the increased reliance on top-down discipline at the Fund had a systematic impact on forecast performance.[4]

22. **Pattern of revisions in growth forecasts.** In past recessions, Consensus and IMF forecasts have been slow in adjusting toward the eventual outcome. Figure 4 shows the average sequence of Consensus forecasts (left panel) and IMF forecasts (right panel) leading up to and during the course of the recessions in individual countries over the period 1990 to 2019. For both Consensus and the IMF, the pattern of revisions has been a smooth adjustment downward toward the eventual outcome (An, Jalles, and Loungani, 2019). In contrast, during the 2020 recession, the IMF's forecasts zig-zagged, overshooting the outcome in June 2020 and then backtracking (Figure 5). Contrary to what first instincts might suggest, it is actually the zig-zag behavior that reflects efficient forecasts (Nordhaus, 1987). Since—as the example of the pandemic vividly illustrates—it is unlikely that news about the likely course and effects of a crisis arrives in a smooth fashion, the smooth revisions in forecasts imply that forecasters are not incorporating all the news into their forecasts in a timely manner.[5]

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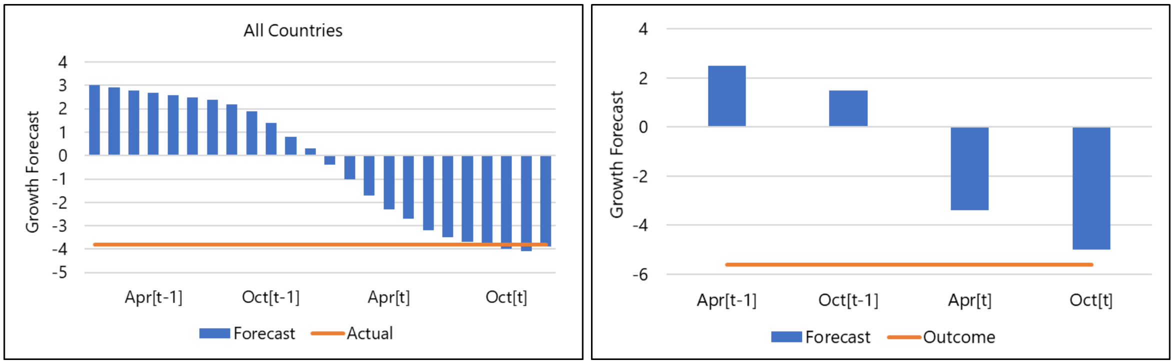
[4] Interviews with Bank staff involved in the forecasting process and with a few major private sector forecasting units do not suggest increased recourse to top-down guidance at these institutions. In any event, the Consensus is an average of the forecasts of around 20 institutions for each country, and is therefore unlikely to be affected much by the change in forecasting processes at a few institutions.

[5] Loungani (2001) discusses the reasons for why forecasters might behave in this way.

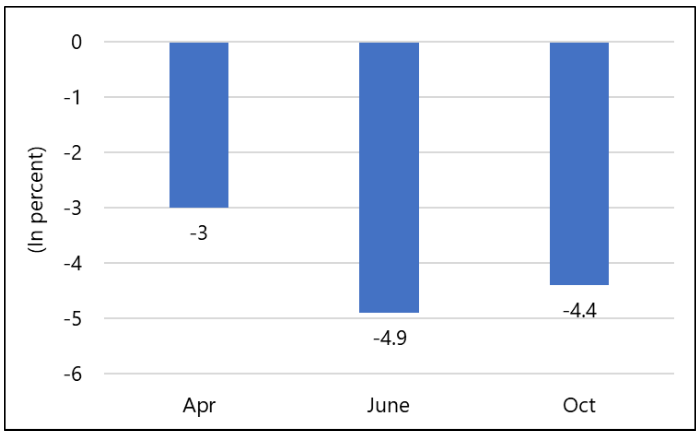
Figure 4. Pattern of Consensus and IMF Forecast Revisions from 1990 to 2019

(In percent)



Sources: Consensus Economics; IMF WEO; IEO calculations.

Figure 5. Pattern of IMF Forecast Revisions in 2020



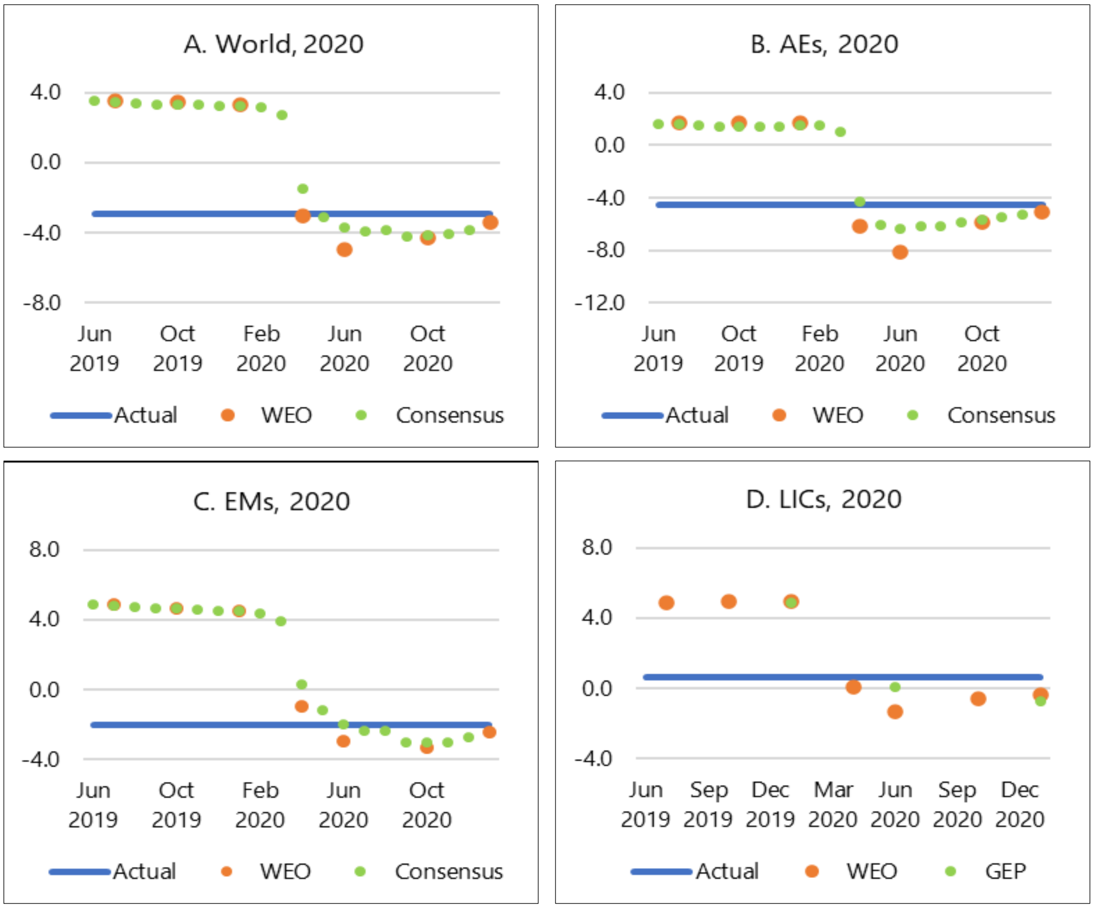
Sources: IMF WEO; IEO calculations.

23. **Comparison with outcomes and other sources.** Figure 6 compares IMF forecasts against outcomes and against forecasts from other sources—the Consensus and World Bank GEP forecasts. As shown in the top left panel, prior to the onset of the pandemic, the IMF and Consensus had virtually identical expectations for global growth in 2020. In April 2020, both sources revised down their forecasts sharply, with the IMF noticeably more pessimistic. In June 2020 as well, the IMF was more pessimistic than Consensus, but both sources overshot the eventual outcome. Over the rest of 2020, both forecasts backtracked toward the outcome. This pattern largely reflects the forecasts for AEs, as shown in the top right panel.[6] For AEs, there was quite a sizable gap between IMF and Consensus forecasts in April and June 2020. For EMs, differences among the three sources were small, though the Fund was more pessimistic than Consensus and the Bank (bottom left panel). For LICs, the Fund was more pessimistic than the Bank in June 2020, but its discrepancy was eliminated by December (bottom right panel).

[6] The performance of the top investment banking firms was similar to that of the Consensus.

Figure 6. Forecasts for Global Growth in 2020—IMF, Consensus, OECD, World Bank

Forecast of Real GDP Growth in 2020



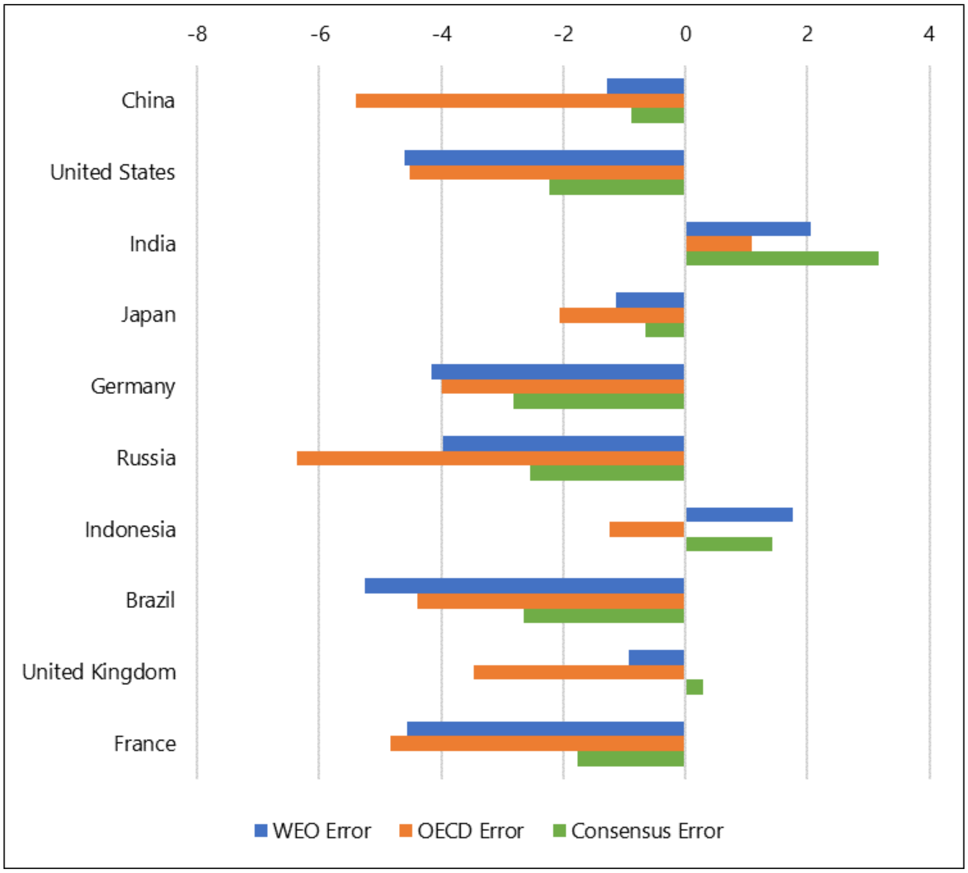
Sources: Consensus Economics; OECD Economic Outlook; IMF WEO; World Bank Global Economic Perspectives.

24. **Comparison for the 10 largest economies.** The behavior of the global growth and AE and EM aggregates is driven in large part by forecasts for the 10 economies with the biggest weights in the aggregates. Figure 7 compares forecast errors for 2020 growth, based on the June 2020 forecast, for IMF and Consensus. In all cases but one (India), the magnitude of the forecast error was greater for the WEO than for Consensus.

25. **Bias in IMF forecasts.** Further evidence that top-down guidance is unlikely to have led to a systematic bias toward pessimism comes from looking at the distribution of forecast errors for all countries. The top left panel of Figure 8 shows that, although not centered around zero, the distribution of forecast errors (based on the June 2020 forecasts) is fairly symmetric—there are numerous countries for which the IMF forecast turned out to be too optimistic. As shown in the remaining panels, this finding also holds for each of the Fund's area departments (though the European department's forecasts are an exception), and for both countries that had IMF assistance approved and those that did not. Some staff and Board members feel that the initial top-down guidance made the implicit assumption that output impacts of lockdowns in EMs and

LICs would be similar to that in advanced economies, which they felt was incorrect and would affect the quality of forecasts for EMs and LICs. However, we did not find systematic evidence for this when looking at forecast errors across country groups.

Figure 7. Forecast Errors for Largest Economies—IMF, Consensus and OECD

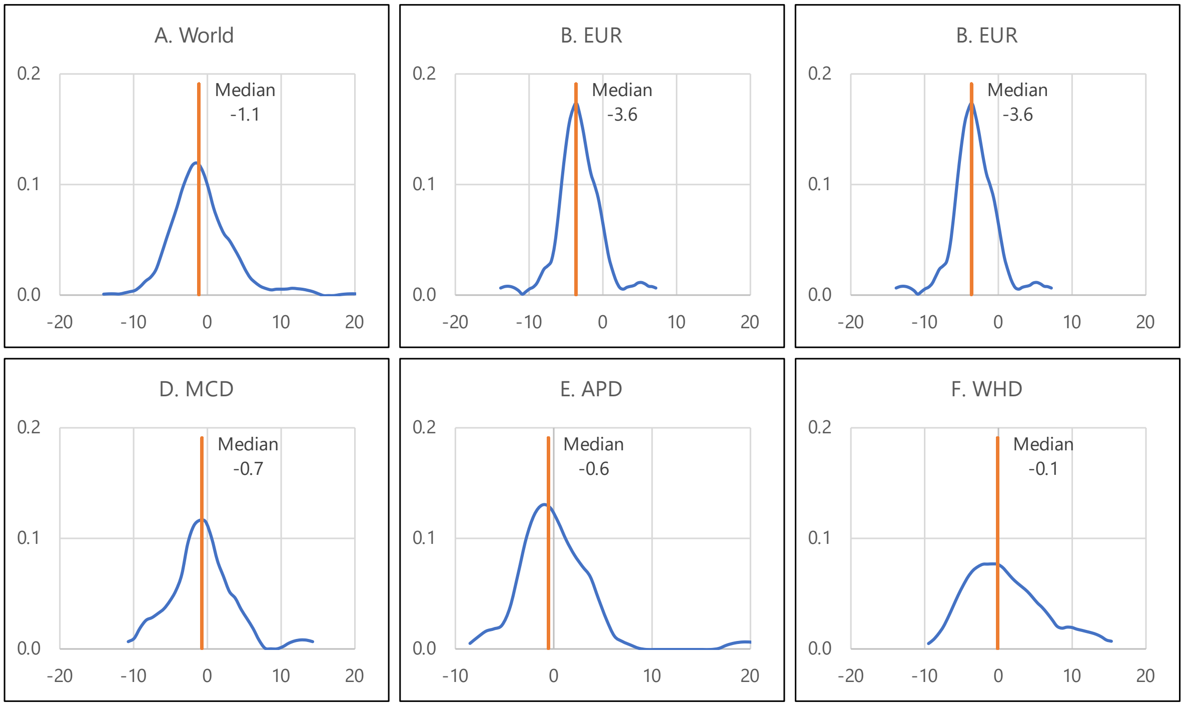


Sources: Consensus Economics; OECD Economic Outlook; WEO.
Note: OECD forecast is the average of the “single hit” and “double hit” scenarios.

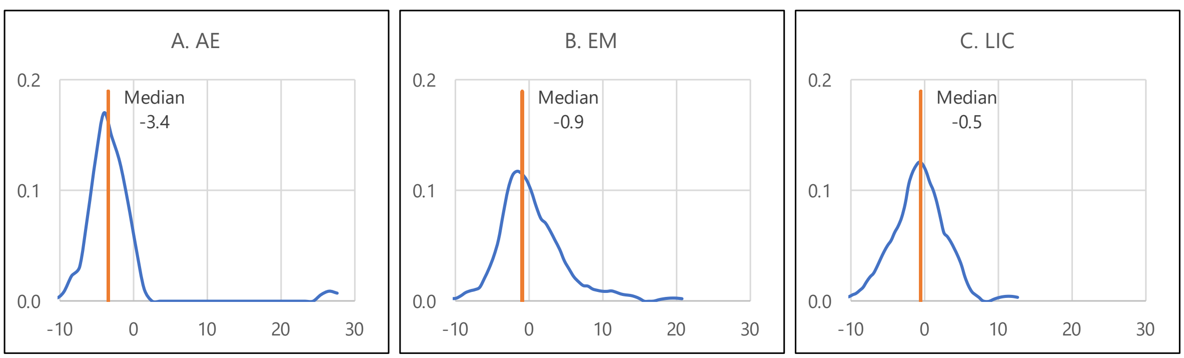
26. **Assumptions about fiscal multipliers.** Blanchard and Leigh (2013) famously found that the forecast errors for the IMF’s 2010 WEO growth forecasts were negatively correlated with its forecasts of changes in fiscal balances, suggesting that the Fund was erroneously assuming fiscal multipliers that were too small. Interviews with staff suggest that awareness that the unique nature of the pandemic shock made blanket assumptions about fiscal multipliers risky. Reflecting this, we found little correlation between 2020 growth forecast errors and forecasts of changes in fiscal balance, providing preliminary evidence that this particular source of past forecast errors may not have been operative this time.

Figure 8. Distribution of Forecast Errors

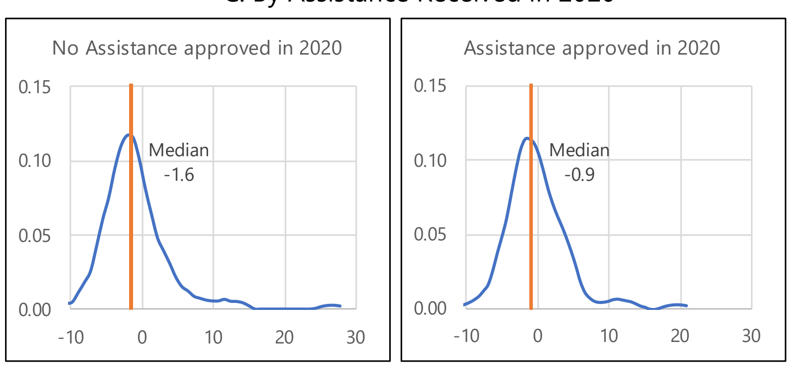
A. By Region



B. By Income Group



C. By Assistance Received in 2020



Sources: IMF WEO; IEO calculations.

27. **Inflation forecasts.** The IMF's judgment that weaknesses in demand would keep inflation low in 2020 despite supply bottlenecks turned out to be correct and led to fairly accurate forecasts on average for all country groups for 2020 inflation. But sticking to this judgment in the face of recovering demand and the growing impacts of supply disruptions led the Fund—along with major central banks and private sector Consensus Forecasts—to miss the upsurge in inflation that got underway in 2021, even though some prominent commentators began to ring alarm bells by February 2021 (for example, Blanchard, 2021; Summers, 2021). Though the forecast miss can be explained as a judgment call that ended up off the mark, it seems that it may mark another instance of Fund reluctance to question conventional wisdom among major central banks (see IEO (2011 for concerns about group-think at the Fund ahead of the Global Financial Crisis (GFC)). MCM recently implemented some arrangements that may mitigate the risk of group-think in the future, consisting of "longer-term external advisors, shorter-term rotating visiting scholars, and an Internal Monetary Policy Advisory Group that meets on a monthly basis." (IMF, 2022).

28. **Communication with the Board and external audiences.**

- On March 4, 2020, RES had circulated internal guidance saying that "there is consensus among the experts that every country will very likely experience a marked increase in COVID-19 incidence in the next 2–3 months…In turn, this is likely to imply a notable hit to domestic activity." Staff and management also communicated these views to the public, highlighting the high degree of uncertainty. On March 4, 2020, the IMF Managing Director (MD) and World Bank President gave a joint press conference in which the MD said, "over the last week have seen a shift to a more adverse scenario for the global economy. We are working on updating our projections."

- These views were communication to the Board in a March 13 presentation, in which staff noted that "economic activity will drop sharply over the next few months, and the global economy will slide into recession as the pandemic unfolds across the membership. Uncertainty remains exceptionally high, and downside risks from a more severe impact are large." On March 23 the IMF stated publicly that it expected "a recession at least as bad as during the global financial crisis or worse. But we expect recovery in 2021."

29. **Highlighting scenario analysis.** The attention to scenario analysis in the WEO has grown over time, partly in response to the recommendations of the 2014 IEO evaluation, which noted that "country officials place high value on the analyses of scenarios and potential risks for the world economy and welcome their more frequent discussion in IMF flagship publications." The consistent discussion of scenarios in the WEO during the pandemic is thus welcome, and the decision to present pandemic-related scenarios was appropriate. The inclusion of this analysis in briefings prepared for the G20 usefully reminded policymakers of possible outcomes and the need to be ready to recalibrate policies if the baseline scenario did not unfold. More could have been done to also highlight this analysis in the Executive Summary of the WEO and in the Chief Economist's opening remarks at the press conference launching the WEO, since these are the

primary sources through which the WEO's messages are disseminated to broader audiences.[7] If scenario analysis and risks for forecasts were more prominent, it is likely that questions and media coverage would also turn in that direction. An illustration of this is provided by the reaction to the OECD's June 2020 report, which did not present a baseline forecast but two alternate scenarios; media coverage of the report noted this "unusual" step and focused their discussions on the possible scenarios. The IMF's scenario analysis would also benefit from further transparency about the data, assumptions and models used in the scenarios and, to convey the results more transparently, better ways of visualizing potential outcomes (Box 1).

Box 1. Enhancing the Impact of the IMF's Scenario Analysis

Continue choosing relevant scenarios: The IMF sensibly chose to include COVID-related scenarios in every WEO and WEO update from April 2020 to June 2021. In most of these WEOs, there was one upside scenario and one downside scenario, such as scenarios where the vaccine rollout was faster or slower than the baseline. In contrast, in April 2020 and July 2021, there were multiple scenarios that were all to the downside. This is consistent with the text of these WEOs, which said that risks to the outlook were on the downside. The IMF should continue this pattern of choosing the most relevant scenarios in each forecast round.

Improve transparency about models and data: When performing scenario analysis, the IMF typically uses the G20 model (Andrle and others, 2015). The model is "semi-structural" in that it is a compromise between fully structural models (where every part of the model has micro-foundations) and fully reduced-form models (which are atheoretical multivariate time series models). This divides the world into 24 "blocks," with one block for each G20 country and the remaining blocks covering the rest of the world.

The IMF deserves credit for describing many of its models in working papers, and for explicitly noting in each WEO that it conducts scenario analysis using the G20 model rather than one of its many other models. The IMF should also share the data, code and documentation of each model as much as practicable. If the IMF did so, it would be participating in a wider trend towards greater transparency in economic research (as see in, for instance, the American Economic Association 2020).

Changes to forecasting frameworks during pandemic: The Fund's team in charge of the RES forecast changed its forecasting framework to address several challenges posed by the pandemic. In April–May 2020, the team developed a pandemic-based sectoral impact framework, which was made available to country teams and country authorities, to estimate the impact of restrictions in mobility (resulting from government lockdowns or voluntary social distancing) on monthly GDP outcomes, based on each countries' sectoral structure. The framework was then combined with the IMF's G20 model to produce the June 2020 and subsequent forecasts. RES also produced two additional tools to help guide the forecasting process, one to estimate the effect of the COVID shock on potential output—an issue of critical importance at the time—and the other to help country teams assess the effects of mobility assumptions on pandemic outcomes.

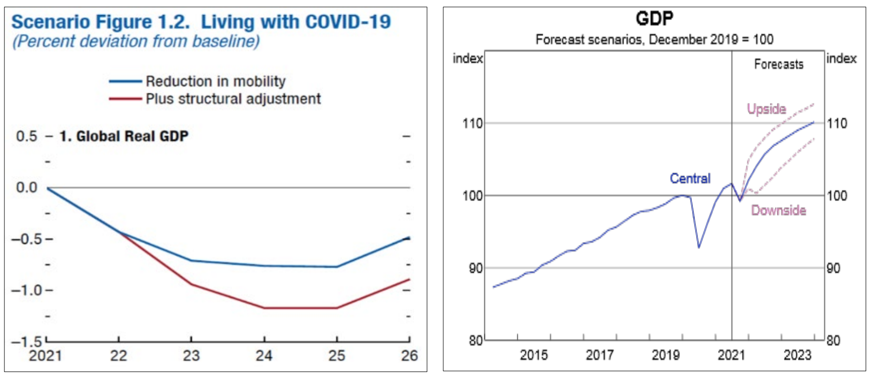
Improve transparency about assumed shocks: The WEO description of scenarios does not always clearly distinguish between the shocks assumed to occur under each scenario and the consequences of those shocks. For example, in the upside scenario of the October 2020 WEO, it is not clear if the reduction in risk premiums is an assumption made as part of the scenario analysis, or whether it is the endogenous response of premiums to the shocks in the G20 model. One approach would be for the IMF to include a sub-heading describing the shocks assumed to occur under each scenario, and a separate sub-heading describing the endogenous responses of the model to those shocks.

[7] Our text analysis found that there was only limited mention of scenario analysis, or of upside and downside risks to the forecasts, in these two sources during the pandemic—in fact, less than was the case during the GFC. Our analysis of journalists' questions during the press conference and the headline coverage of the WEO in major media sources shows that these tended to focus on the changes to the baseline forecasts that were highlighted in the two sources.

A transparent description of the shocks is especially important for scenarios that the models are not typically designed to handle. An example is the first scenario in the April 2020 WEO, which assumed "the measures to contain the spread of the virus in 2020 last roughly 50 percent longer than assumed in the baseline". The G20 model does not explicitly model containment measures, so the IMF will have had to decide how to represent longer containment measures as shocks to the variables in the model. Unless the IMF explicitly describes those shocks, readers have no way of knowing if this has been done in a reasonable way.

Improve graphs of scenario outcomes. The WEO uses graphs to visualize the effects of different scenarios on macroeconomic and financial variables. These graphs show the deviations of variables from their baseline (left panel below). An alternative approach would be to show the path of variables under the baseline and each alternative scenario (right panel), as done in this example from the Reserve Bank of Australia. In this example, the graph makes it easy to see that GDP would still rise in the downside scenario, rather than merely falling at a faster rate.

WEO Scenario Presentation | **RBA Scenario Presentation**



Sources: Australian Bureau of Statistics; Reserve Bank of Australia.

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Prepared by Martin McCarthy.

30. **Overall assessment:** Overall, we find that the Fund did well in adapting the process for formulating its global and country forecasts to meet the challenges of the pandemic.

- Staff moved quickly—including through consultation with health experts—to recognize by early-March 2020 that the pandemic would lead to recessions in most countries. There was increased reliance on top-down guidance to take on board an institutional view of the likely economic damage from the pandemic. Interviews with several country desks suggest that they welcomed this guidance as there was scant country-specific information, at a time when there were no reported cases of COVID-19 in many countries, that could be bought to bear on assessing the likely impacts. The IMF's April 2020 forecasts for global growth, which reflected the top-down guidance, turned out be close to the eventual outcomes.

- The further downward revisions in Fund forecasts in June 2020 turned out to be pessimistic but they appear to represent staff's best attempt to reflect its information and views at the time rather than an attempt to make a deliberately dire assessment of the outlook. As further information became available, staff revised forecasts upwards in the October 2020 WEO. From the point of view of forecast efficiency, this zig-zag ('jaggedness') in forecasts is a positive development, and a departure from the practice during previous recessions when revisions to forecasts were excessively smooth, suggesting a reluctance to incorporate all available information into forecasts in a timely manner.

- The Fund's forecasts were broadly comparable to those of the Consensus and the World Bank, albeit noticeably more pessimistic in June 2020. Admittedly, there were some large forecast errors, particularly for the largest economies, but the direction of the errors was similar for the Fund and Consensus.

- Forecast errors were large for Brazil, which complained publicly about the pessimism in Fund forecasts, but Consensus was also pessimistic about growth in Brazil. And the Fund made large forecasts errors not only for Brazil but for France, Germany, Russia, and the United States.

- As some Executive Directors noted, communication of forecasts to the Board could have been a bit quicker.

III. ASSESSMENT OF IMF POLICY FORMULATION PROCESSES

A. Evolution of IMF Policy Advice

31. **IMF policy monitoring and advice.** IMF policy advice is typically provided through Article IV consultations (which cover both bilateral and multilateral surveillance) and multilateral surveillance reports, including the WEO, the Fiscal Monitor (FM), the Global Financial Stability Report (GFSR), and inputs to the G20 process. The Fund's reprioritization to meet emergency needs meant that staff work on Article IV consultations was temporarily suspended, but Fund staff report that they remained in close contact with country authorities to assess the pandemic's impact and provide advice (IMF, 2020). In addition, staff provided advice through a Special Series of Covid Notes and information on countries' policy choices through trackers.

32. **Advice on fiscal tools.** The IMF's multilateral surveillance reports in April 2020 noted the human cost of the pandemic and urged that "government responses should be swift, concerted, and commensurate with the severity of the health crisis, with fiscal tools taking a prime role" (IMF, 2020e). An accompanying blog co-authored by Vitor Gaspar, Director of the IMF's Fiscal Affairs Department (FAD), stated what became an oft-cited characterization of the IMF's fiscal policy advice (Gaspar, Lam, and Raissi, 2020): "fiscal policy is key to save lives and protect people. Governments have to do whatever it takes. But they must make sure to keep the receipts."[8] Specifically, the Fund advocated that governments target support to households to ensure access to basic goods and services and to viable businesses to limit layoffs and bankruptcies but ensure that the support respected principles of good governance, such as accurate accounting, disclosure of information, and adoption of procedures for ex post accountability ("keep the

[8] The IMF's MD likewise noted: "In the early months of the pandemic, [Georgieva] says, "I don't know how many times I would go, publicly, and I would say 'Spend. Keep the receipts. But spend.'" (Financial Times, October 9, 2020).

receipts"). The IMF also urged governments to monitor, and disclose risks involved in additional spending because some fiscal measures would have a lingering effect on deficits and debts. While the headline message was to do "whatever it takes," the Fund also emphasized that spending should be targeted and temporary to avoid a build-up of fiscal risks.

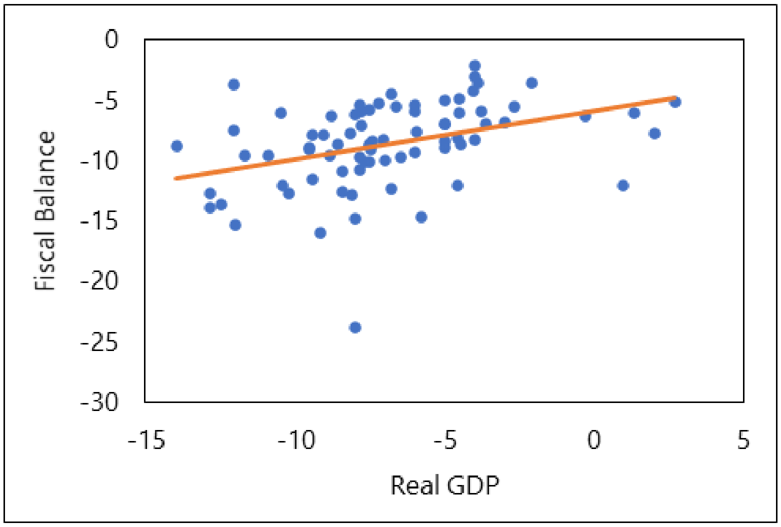
33. **Advice on fiscal space.** The April 2020 FM (IMF, 2020e) recognized that the ability to do "whatever it takes" would differ across country groups. Advanced economies would in general be better placed than others, and the FM noted that many had already announced large fiscal packages, such as the "unprecedented $2 trillion or almost 10 percent of GDP" CARES Act in the United States. The Fund considered that many EMs also had the space to provide fiscal support and a number of them had already announced new fiscal packages or augmented or amended existing fiscal programs in response to the needs of the pandemic; examples included Brazil, which provided support of 7 percent of GDP in 2020 alone (of which 4 percent of GDP was emergency assistance), Malaysia (nearly 3 percent of GDP), and India (nearly 1 percent of GDP). LICs were the most constrained in their fiscal space, and hence the FM emphasized the importance of international support in the form of financial and medical resources to help these countries carry out its policy advice.

34. **Caution against premature withdrawal of fiscal support.** While advocating a large fiscal response, the IMF also advised a suitably-paced medium-term fiscal adjustment when the health crisis had waned. As health, economic and inflation conditions evolved, fiscal advice in subsequent issues of the Fiscal Monitor (including updates) kept pace with developments, gradually moving to advising a less expansionary stance. Specifically, by the time of the October 2020 FM, when economic prospects looked more promising in many countries than they had mid-year, the Fund emphasized "the importance of not pulling the plug of fiscal support too soon, in spite of the high levels of debt prevailing worldwide" (IMF, 2020f) while continuing to differentiate across countries among countries based on their fiscal space. The January 2021 FM update (IMF, 2021b) stated that policymakers should balance risks from large public debt "with the risks from premature withdrawal of fiscal support, which could slow the recovery."

35. **Managing divergent recoveries.** By April 2021, while global growth was expected to be a robust 6 percent for the year, the IMF emphasized the divergent paths of the recovery across countries and within countries. The Fund advocated that "when support is eventually scaled back, it should be done in ways that avoid sudden cliffs" to limit long-term economic scarring from the effects of the pandemic (IMF, 2021i). The April 2021 FM (IMF, 2021k) noted that the pandemic had worsened pre-existing inequalities, and also stressed the adverse effect that sudden scaling back of fiscal support could have on vulnerable segments of the population. The Fund also urged that medium-term fiscal policies should attempt to improve access to basic public services, particularly health care and education (Amaglobeli, Gaspar, and Mauro, 2021). The April 2021 FM also advised differentiated fiscal support in order to avoid propping up low-productivity firms and to avoid blanket loans and guarantees. The October 2021 Fiscal Monitor (IMF, 2021l) contained additional warnings about elevated risks to the fiscal outlook and highlighted the need to build back fiscal space through credible medium-run fiscal frameworks.

36. **IMF's fiscal balance forecasts.** Based on its growth forecasts, the IMF expected a sharp collapse in government revenues during 2020, while there would be increased spending pressures, even if not all countries would or had the ability to go along fully with the IMF's advice to spend liberally. The IMF thus forecast a sharp deterioration in fiscal balances in 2020, with greater deterioration expected where output declines were projected to be greater (Figure 9).[9]

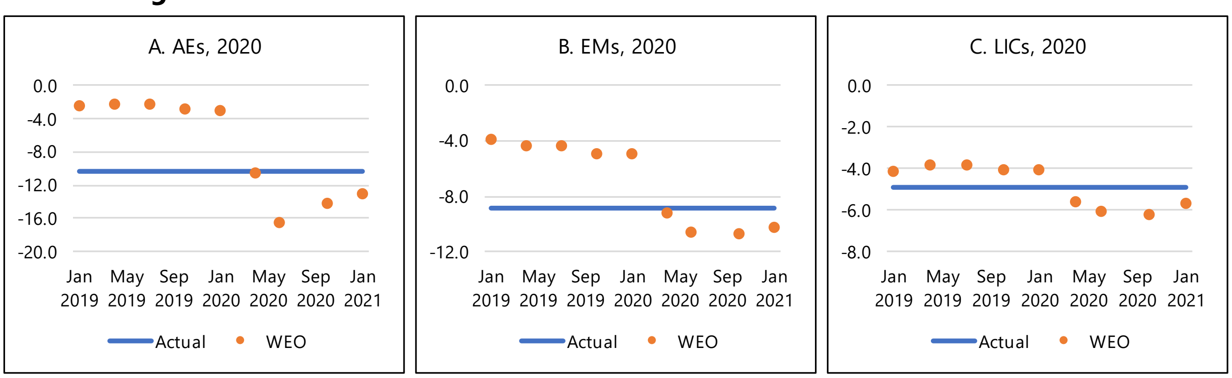
Figure 9. Forecasts for Fiscal Balances and GDP
(June 2020 WEO Forecasts for 2020)



Source: IMF WEO.

37. The deterioration was expected to particularly sharp in AEs, where several countries had already taken major spending initiatives in response to the pandemic, compared with that in EMs and LICs (Figure 10). As with the growth forecasts, the IMF's fiscal balance forecasts made in April 2020 were quite accurate on average, while the June 2020 forecasts reflected a pessimism that had to be dialed back over the course of the year.

Figure 10. Evolution of Fiscal Balance Forecasts in Percent of GDP for 2020



Source: IMF WEO.

[9] Using cyclically-adjusted fiscal balances gives similar results.

38. **Advice on monetary policies to advanced economies.** Along with its strong recommendation for stimulatory fiscal policies, the IMF also urged central banks, particularly in the AEs, to do their part to support aggregate demand in their countries, and globally, through easing of monetary policies. In internal memorandums to IMF management, and publicly in successive editions of the WEO and Global Financial Stability Report, Fund staff supported the steps taken by the major advanced economy central banks to cut interest rates and implement unconventional monetary policies—mainly to provide liquidity support to distressed enterprises—as they had done during the GFC.

39. **Advice on monetary policies to EMs:**

- For EMs, the Fund supported policy interest rate cuts but was publicly reticent in the initial months of the pandemic about how it viewed the use of unconventional monetary policies by several central banks in these countries. By end-April 2020, about 20 EM central banks had launched or announced some form of government bond purchase program, but this development was not discussed in the April 2020 WEO and GFSR or in the Monetary and Capital Markets (MCM) Director's April 2020 briefing to the Board on World Economic and Market Developments (WEMD).

- The June 2020 GFSR update made the factual observation that "a number of emerging market central banks have embarked on unconventional policy measures for the first time" without offering much in the way of endorsement or caution. In September 2020, a Special Series note (Hofman and Gunes, 2020) discussed the use of UMP by EM central banks, concluding that "the balance of benefits and risks needs to be considered carefully on a country-by-country basis." The October 2020 GFSR provided an in-depth analysis of the various asset purchase programs (APPs) implemented by EMDE central banks. While giving a positive assessment to APPs in reducing market stress, the staff analysis highlighted several risks of open-ended programs, including weakened institutional credibility, distorted market dynamics, increased capital outflow pressure, and fiscal dominance. This cautious message was amplified in a MCM departmental paper in October 2021 (Adrian and others, 2021) and in a January 2022 blog co-authored by the MCM Director titled "Emerging-Market Central Bank Asset Purchases Can Be Effective but Carry Risks (Adrian, and others, 2022)."[10]

40. **Discussion of spillover effects.** Of the WEOs published between April 2020 and April 2021, the April 2021 outlook contained a chapter on monetary spillovers. Staff analysis suggested that the Fed's monetary easing had helped reduce yields in EMs by more than 100 basis points. In addition to this broad spillover effect, the US dollar swap lines established with Mexico and Brazil were considered to have been effective in calming markets. The ECB's monetary policies had smaller and more regional effects. In line with the Management

[10] An IMF working paper by Fratto and others (2021) described asset purchase programs of 27 emerging markets and 8 small advanced economies between March and August 2020.

Implementation Plan for the IEO evaluation on the IMF's Advice on Unconventional Monetary Policies, discussion of spillovers effects was also carried out through conferences organized in 2020, 2021, and 2022 with the BIS, BoE, and ECB.

41. **Advice on dealing with capital outflows.** The COVID-19 outbreak triggered large portfolio outflows from EMDEs, with non-resident portfolio investors quickly pulling a record US$83 billion in March 2020 alone, much larger than outflows seen during the GFC and stress events such as the "taper tantrum" in 2013 or the China risk shock of 2015 (Batini and Durand, 2020). The IMF's advice on dealing with the outflows, particularly on the use of capital flow management measures, was in line with the Institutional View approved in 2012 (IMF, 2012). Chapter 3 of the April 2020 GFSR offered a conceptual template for dealing with capital flow volatility, concluding that in the "face of an imminent crisis introducing capital outflow measures could be part of a broad policy package, but these measures cannot substitute or avoid warranted macroeconomic adjustment." In an April 2020 internal note, MCM staff offered more guidance on how, if they were needed, outflow CFMs should be designed and implemented and how to assess their cost-benefit tradeoffs. In the event, external pressures eased significantly by May, aided by actions by advanced economy central banks, and only a few EMDEs resorted to outflow CFMs.

B. Assessment

42. **External views on IMF fiscal policy advice.** The IMF's advice on fiscal policies in 2020 elicited a range of views. In our interviews with country officials, there was generally praise that the IMF had rapidly adapted its advice to the needs of the pandemic. Some country authorities, however, found the IMF's advice to "do what it takes but keep the receipts" as not suitable to their fiscal situations, particularly as they felt that the first part of the message ended up receiving greater attention in political circles than the second, and because they were concerned about the extent of fiscal space. Civil society organizations (CSOs) were supportive of the Fund's general exhortation to spend, but they too felt that inadequate attention was being paid to the processes for "keeping the receipts." CSOs also argued that the IMF advice to spend was not adequately reflected in the IMF's country advice, particularly in countries seeking IMF financial support and they were critical of the IMF's advice to countries to bolster their fiscal positions following the crisis.

43. **Assessing the process for formulating fiscal policy advice.** Judging the costs and benefits of the IMF's fiscal policy advice is beyond the scope of this paper in part because it needs to be assessed over multiple years. However, some early reflections can be offered on the Fund's processes for formulating and offering advice and the extent to which the Fund attempted to correct past deficiencies in its advice.

- *"Do what it takes …"*: The Fund deserves praise for quickly reformulating its policy advice in its multilateral surveillance documents after sufficient internal discussion of the costs and benefits of alternative policies and for disseminating it clearly. Departmental comments on the draft FM show that staff were well aware of the medium-term consequences for public debt of advocating a policy of "do what it takes" but felt that the humanitarian needs of the moment trumped such concerns. For instance, the African Department (AFR) commented:

"… we would emphasize even more strongly the need for countries to do whatever it takes to bring the pandemic under control, and to take strong action to deal with the economic and social fallout. At this juncture, the debt should be a concern [only] inasmuch as it may hamper countries spending what they should…."

Both RES and SPR, fearing that the Fund's policy guidance for the present could get muffled, urged that the FM focus squarely on the short-term fiscal support measures needed rather than on the measures that would be needed over the medium term to stabilize the fiscal situation. SPR also questioned the importance given in the draft FM to targeted measures noting that there were "practical limits" on how effectively this could be done, and noting that the Fund had supported the U.S. stimulus package, "[which] doesn't seem to prioritize targeting." Having formulated its policy stance, the Fund effectively disseminated it through the IMF blog, which is widely followed, and through public statements by the MD and FAD Director and interviews in prominent media sources.[11] As noted, some felt that the IMF's advice in the process had been reduced to a slogan, but interviews with Fund staff, including in the Communications Department, suggest that they considered this a risk that needed to be taken to provide a clear sense of what the IMF was advocating.

- "… but keep the receipts": The Fund correctly urged countries to monitor carefully where the extra spending was ending up. While this has always been part of the Fund's corporate message on fiscal policy, its implementation at the country level in IMF programs got off to a slow start. As discussed in the background paper by Kincaid and others (2023), governance safeguards in emergency financing programs were a moving target: they were strengthened over time as the IMF's Executive Board and CSO raised concerns about potential misuse of government funds. In hindsight, a quicker alignment of the corporate message with practices at the country level would have been desirable.

- Premature withdrawal: The Fund's caution against premature withdrawal of fiscal support, which was a theme of the October 2020 FM and April 2021 FM update, was a recognition of the scale and unique nature of the pandemic shock. But is also appears to have been motivated in part by a desire to avoid the experience following the GFC. In that crisis, many governments had provided strong fiscal stimulus at the onset of the crisis, but turned toward fiscal consolidation in 2010 based on forecasts of an economy recovery that proved too optimistic. Many observers were critical of the decision of these governments to start to withdraw fiscal support—which in their view contributed to the

[11] See, for instance, the MD's interview with the Financial Times: "Georgieva says that after the pandemic hit, Blanchard had got in touch with her. 'He was concerned that the Fund may be too slow to recommend increased spending, and I think he found that he was knocking on an open door.'" (October 9, 2020).

tepid recovery from the crisis—and the IEO's 2014 evaluation of the IMF's response to the GFC (IEO, 2014b) was critical of the Fund's support for this move. As with the formulation of the initial policy stance, there was active departmental review of this position and some divergence in views on how strongly it should be pushed. For instance, in commenting on the draft January 2021 FM update, RES noted its agreement with the message "to avoid premature withdrawal of support," while the African Department argued that "the overall policy recommendation ("do not withdraw fiscal support too fast") should be more nuanced to account for financing constraints." And within FAD, some staff would have preferred that the Fund "emphasize the need to maintain fiscal sustainability and rebuild fiscal buffers as soon as possible … The current episode is not the last crisis, so unless they are rebuilt, dealing with the next one will get a lot more difficult."

- Distributional considerations: The IMF appropriately emphasized the global and country-level policies needed to forestall a K-shaped or divergent recovery, namely, one in which richer countries recover faster and more strongly than poorer ones, and richer classes within countries fare much better than poorer ones (IMF, 2021a and 2021i; Furceri and others, 2021; Emmerling and others, 2021; Benedek and others, 2021). As noted earlier, CSO remained concerned about the extent to which these corporate messages were reflected in country level advice.[12]

44. **Interactions with central banks.** The Fund had closer interactions with advanced economy central banks than emerging market ones.

- *Advanced economies.* Fund staff moved quickly to lend support to the actions of major advanced economy central banks to ease policies through interest rate cuts and unconventional monetary policies. For instance, in a March 19, 2020, memorandum to management, staff characterized the steps taken by the Fed as "very welcome" and urged that the "Fed should be actively considering further programs" such as purchases of investment grade corporate debt. Interviews with MCM senior staff reveal that there were informal discussions with the Fed and other major advanced economy central banks on steps that were under consideration.

- *Emerging Markets.* In contrast, interactions with EM central banks which were contemplating or launching asset purchase programs were far more limited. MCM senior staff noted that while there were active discussions within the department on the issue, there was a lack of consensus. Some staff were sympathetic to the notion that EM central banks had to support their economies through unconventional means given the gravity of the situation, while others were concerned about the risks to inflation and financial stability from such policies in environments where inflation expectations were less well-anchored and central bank independence not fully secured. Some EM country teams

[12] The IEO's 2021 evaluation of *Growth and Adjustment in IMF-Supported Programs* (IEO, 2021) advocated greater sensitivity to social and distributional consequences to support more inclusive growth outcomes in IMF programs while achieving needed adjustment.

where such policies were being announced did approach and receive tailored guidance from MCM staff on the risks and benefits of asset purchase programs, and these policies were also discussed during meetings of the Monetary Policy Advisory Group, an internal group set up in response to recommendations of the IEO's 2019 evaluation of *IMF Advice on Unconventional Monetary Policies* (IEO, 2019). Interviews with some market participants and monetary policy experts suggest that it would have been welcome if the Fund had weighed in more quickly on an important new policy development; it was felt that as in case of the use of negative interest rates during the GFC, the IMF's first public judgments on the use of unconventional monetary policies by EMs came too long after countries had already taken these steps without the benefit of consultation with the Fund. Staff are of the view that their reticence was justified since the impacts of new policy initiatives cannot be accurately judged in the short run or indeed even after considerable passage of time, as evidenced by continuing debates on the efficacy of negative interest rates.

45. **Assessment of formulation of advice on outflow CFMs:** The IMF appropriately refrained from a public discussion of the need for outflow controls when EMDEs were facing massive outflows in March and April 2020 given the desire not to further inflame a difficult situation. But internally Fund staff offered both general guidance and country-specific advice on the use of outflow CFMs should they turn out to be needed, including in a presentation of the internal April 2020 note to staff as part of the activities of the Financial Surveillance Group. At this presentation, MCM staff answered questions from area department staff—many from countries facing outflows—on how effective CFMs would likely prove in their particular country circumstances. MCM staff also report having a few confidential discussions initiated by country authorities on the likely efficacy of outflow CFMs in their particular circumstances.

46. **Overall assessment of policy formulation processes.** Overall, Fund staff deserve great credit for continuing to produce high-quality multilateral surveillance reports that provided member countries and the international community with comprehensive and coherent narratives on economic and financial developments. The Fund quickly decided that strong fiscal support from governments was the key policy response needed to save lives and maintain livelihoods. While the risks and rewards from this advice can yet be judged, the advice was arrived at after adequate internal discussions and once agreed on was communicated clearly to country authorities and the broader policy community.

IV. HOW-TO NOTES AND POLICY TRACKER[13]

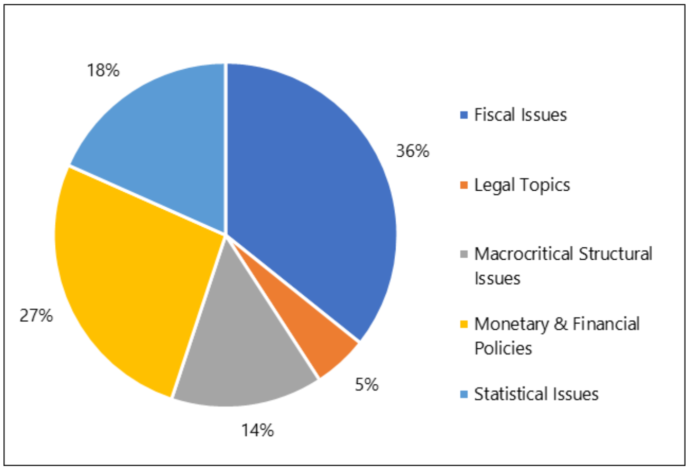
How-To Notes

47. **Characteristics of the notes:** The IMF produced the Special Series of COVID-19 Notes to help country authorities address the economic effects of the pandemic and to help internal dissemination of Fund advice among staff at a time when normal modes of interaction among staff

[13] The material on "How-To" notes was prepared by Martin McCarthy and Hites Ahir and the material on the policy tracker by Natalia Kryg.

were disrupted. The notes covered a variety of topics (Figure 11), with functional departments authoring a large majority of them. FAD, LEG, MCM, and STA produced notes in their respective areas of specialization. The macro-critical structural issues notes were produced by a mix of departments, of which two-thirds were written by RES or SPR and a third by area departments.

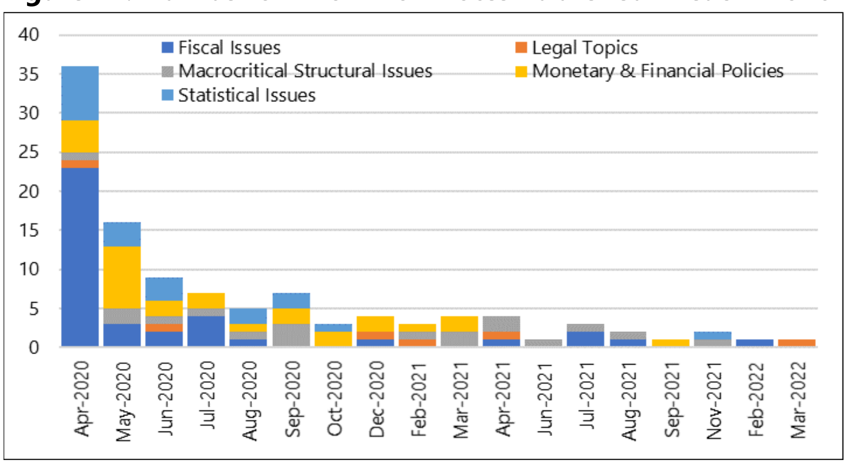
Figure 11. Topics of "How-To" Notes



Source: IEO calculations.

48. The notes were produced rapidly in the early months of the pandemic but continued to be produced up to March 2022 (Figure 12).

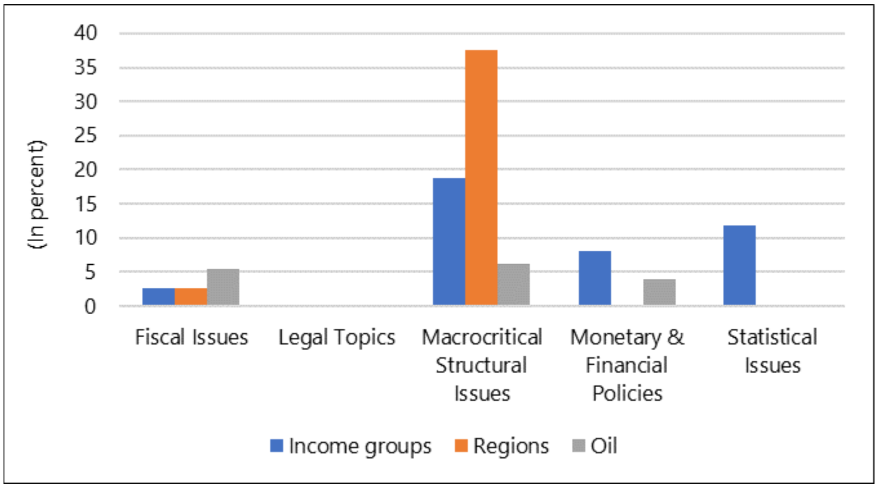
Figure 12. Number of "How-To" Notes Published in each Month



Source: IEO calculations.

49. **The intended audience of the notes:** The intended audience of the notes was very broad. Some were intended to be useful to IMF staff while others were more targeted to country authorities. And while some notes were targeted at specific income groups or regions, or at oil-exporting countries, the vast majority were not explicitly targeted at any one group of countries (Figure 13).

Figure 13. Target Audiences for "How-To" Notes
Proportion of Notes Whose Title Specifies a Group of Countries



Source: IMF.

50. **Usefulness to staff.** Staff report finding the notes useful. In the staff survey, 64 percent of respondents agreed or strongly agreed that the notes "meaningfully influenced policy advice" to their country on issues arising from the pandemic" (Koh and Wojnilower, 2023). However, this likely masks substantial variation in the usefulness of individual notes; some staff interviews suggested that the early notes were "too broad," though they did get more specific over time.

51. **Usefulness to authorities.** Departments, FAD in particular, carried out extensive (virtual) outreach to disseminate the analysis and advice in the notes to country authorities, and report that authorities appreciated the Fund's efforts. The advice offered in the notes was internalized by country teams and tailored to country circumstances in bilateral consultation or programs. Our interviews with country officials, conducted as part of case studies, suggest that the notes were perceived as a "mixed bag" with a few considered as useful but others less so; like Fund staff, authorities also felt that some notes were "too general" to be of immense value in their particular circumstances, though they provided useful cross-country information.

52. **Lessons**. Producing the notes was a major effort on the part of staff and represents a substantial allocation of staff's time during a period of heavy workloads. If this effort is carried out again in future crises, some lessons from the experience during the pandemic would be the following:

- **Coordination:** A small committee could be considered to provide guidance on possible topics and share information across departments on what is under production. Our understanding is that during the pandemic there was no central guidance on the production of the COVID notes; instead, individual departments made separate decisions about their own notes. A committee could ensure that the IMF focuses on producing notes likely to be most useful to their intended audience.

- **Clarity on target audience.** It would seem helpful to explicitly identify the intended audience for the notes and allow users of the landing page for the notes to filter notes by audience. This would both force authors to think in advance about the intended audience and make it easier for users to identify the advice appropriate for their country. It might also help if notes were targeted at narrower audiences; some notes during the pandemic—for instance on managing fiscal stresses or on policy advice for an entire region—were very broad and may have contributed to authorities' perceptions that they were too general to be of value.

- **Translations.** While FAD arranged for almost all of its notes to be translated into seven other languages, most departments translated only a minority of notes. Some notes aimed at Sub-Saharan Africa might have been more useful if made available in French and notes aimed at oil-exporters more useful in Arabic. Having a committee decide translation policies on a cost-benefit basis would be useful in the future.

Policy Tracker

53. **COVID-19 Policy Tracker:** Staff across the Fund put together a unique policy tool in a record time that summarized the key economic policy responses governments were taking to limit the health and economic impacts of the COVID-19 pandemic.[14] The IMF's MD launched the tool, noting that "sharing knowledge about COVID-19 enables us all to tackle the crisis more effectively." The tracker was launched on March 25, 2020 and updated on regular basis. By early-April 10, 2020 it was one of the most visited items on imf.org, and regarded internally as evidence of good interdepartmental collaboration and evidence of strengthening of the knowledge management culture within the Fund. The policy tracker initially started with information on the G20 economies but expanded its coverage to 197 economies by the time of its last update on July 2, 2021. Staff attributes the tracker's success to verification of the data by experts (including classification of measures above or below the line) and frequent updating—the tracker was updated on a quarterly basis until October 2021.

54. **Similar database initiatives conducted by others:** While there have been several initiatives to collect information on economic and financial policies implemented in response to the COVID-19 pandemic around the world, existing sources vary in breadth, granularity, and frequency of coverage. Examples of similar cross-country sources include: the COVID-19 Policy Database by the Asian Development Bank, the monetary policy tracker by the Bank for International Settlements (Cantú and others, 2021), the Country Policy Tracker by the OECD, the Financial Sector Policy Database by Feyen and others (2020) at the World Bank, the COVID-19 Policy Measures Database by the European Systemic Risk Board, and the COVID-19 Financial Response Tracker by the Yale Program on Financial Stability.[15]

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[14] The tracker drew on regular IMF staff surveillance activities, combined with information from a series of alternative sources including other existing trackers, government websites, news reports, and reports from government agencies or the private sector.

[15] See Kirti and others (2022).

55. **Worthwhile but resource-intensive initiative.** Our interviews, particularly with some Executive Directors' offices, suggest that the policy tracker was considered a very worthwhile initiative on the part of the Fund. Authorities found it useful to get information on what policies other governments were following as they attempted to calibrate their own policies to their particular circumstances. Fund area department staff appreciated the need for the tracker but stressed in our interviews with them that it took a considerable amount of their time to be able to collect and sift through the information of the policies their countries were adopting.

V. CONCLUSIONS

56. **Increased top-down guidance.** Fund staff quickly revised their global economic outlook, consulting with epidemiologists and health experts on the likely duration and spread of the pandemic and its economic impact. There was greater recourse to top-down guidance from the Research Department during the forecasting process to ensure shared assumptions about the duration and economic impact of the pandemic. For instance, country teams for the major EM desks were urged to cut their forecasts by "at least as much" as the forecast was lowered in advanced countries. Interviews with area department staff suggest that they accepted the need for increased top-guidance and, by and large, did not feel that it hindered their ability to adjust their forecasts for country circumstances. Some staff and Board members feel that the initial top-down guidance made the implicit assumption that output impacts of lockdowns in EMs and LICs would be similar to that in AEs, which they felt was incorrect and would affect the quality of forecasts for EMs and LICs. However, we did not find systematic evidence for this when looking at forecast errors across country groups.

57. **Pessimism in June 2020 growth forecasts.** In contrast to fears expressed in policy and media circles in the early months of the pandemic that the IMF's forecasts were too rosy, the IMF's June 2020 forecasts ended up being much more pessimistic than the eventual outcome: The forecast errors were particularly large for the "top ten" countries—the countries with the highest weights in the global forecast. However, the reason for this excessive pessimism cannot all be attributed to increased top-down guidance on the extent of cuts to make in EM and LIC forecasts or on assumptions about the impact of lockdowns in EMs. In fact, forecast errors were much larger for AEs than for EMs and LICs. For the latter country groups, the IMF's 2020 growth forecasts turned out to be reasonably accurate on average, though errors were large for EMs among the 'top ten.' Private sector Consensus Forecasts also shared the pessimism of the IMF's forecasts, though not to the same extent. In our view, the pessimism resulted from staff's attempt to best reflect the information on hand at the time rather than a deliberate attempt to make a dire forecast.

58. **Surge in 2021 inflation missed.** A bigger forecast miss was the failure to catch the sustained surge in inflation starting in 2021, a concern starting to be flagged by some outside experts by spring 2021. Staff had accurately forecast that 2020 inflation would be subdued based on their judgment that demand weakness would outweigh the effects of supply disruptions. However, this view was not recalibrated to changing circumstances in early 2021, including the strength of continued policy stimulus as economies were recovering quite rapidly, and the Fund's

inflation forecasts failed to predict the pick-up in 2021 inflation. The failure can be attributed to a judgment call that went off the mark, and the Fund shares this failure with forecasters at the Fed and other major central banks. But it would be useful for staff—or for the external advisory group being set up by MCM—to consider further the sources of the failure, including the possibility that it may be due in part to excessive Fund deference to conventional wisdom among major central banks.

59. **Fiscal policy advice.** The Fund quickly urged countries to "spend but keep the receipts." We broadly share the view of many that the Fund's advice was bold, appropriate for the circumstances, clearly communicated, and avoided past mistakes. It is clear that the Fund's fiscal policy guidance was made with awareness of future risks and after considerable internal consultation and Board review, notably during the Board discussions of Fiscal Monitor reports. But some country authorities feel that the Fund's advice was too broad-brush to be suitable in all country circumstances and that it provided political cover for governments that were inclined to follow the advice to spend without consideration for other aspects of the Fund's advice.

60. **Monetary policy advice.** The Fund broadly supported the stimulative policies adopted by central banks in AEs and EMs, and also recognized their positive spillovers for the global economy. However, while internally debating the pros and cons of the use of unconventional monetary policies by EMs, the Fund refrained from a timely public stance. As reflected in views expressed by some policymakers and market participants, the Fund could have been more active as a forum for public discussion of the issue, in part drawing on analysis by its monetary policy experts group (formed in response to a recommendation in an earlier IEO evaluation). It would have been particularly useful to bring in more external EM monetary policy experts—which should have been facilitated by the switch to working in a virtual environment.

61. **Advice on dealing with capital outflows.** Staff was careful to follow the Institutional View's guidance on managing volatile capital flows, including emphasis on the role of flexible exchange rate management. The Fund appropriately refrained from public comment on the use of capital flow management measures during the months of sharp outflows from EMs and LICs at the start of the pandemic, which could have added to market volatility, while being more open internally to supporting use of such measures should the situation continue to deteriorate. Functional department experts engaged with country teams, and in a few cases confidentially with country authorities, on what measures would be most effective in their country circumstances should they be needed.

62. **Policy tracker and policy guidance notes.** The IMF deserves much credit for launching a widely appreciated policy tracker to share information on policies put in place by governments around the world to deal with the unique challenges of a joint health and economic crisis. The tracker was launched on March 25, 2020 and by April was already one of the most visited items on the IMF's website. The Fund also scrambled to produce an extensive series of "How-To" notes on policies to respond to the unprecedented circumstances of the pandemic, which was generally appreciated by both staff and country officials, although more granularity would have been helpful in some of these notes.

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