March 14, 2023
Approval: 3/21/23

INTERNATIONAL MONETARY FUND

Minutes of Executive Board Meeting 19/85-1

2:30 p.m., October 3, 2019

1. World Economic Outlook; Global Financial Stability Report; Fiscal Monitor

Documents: EBS/19/80; EBS/19/81; EBS/19/85; EBS/19/86; SM/19/219; and Supplement 1; SM/19/222; SM/19/223; SM/19/225; SM/19/226; and Supplement 1

Staff: Gopinath, RES; Adrian, MCM; Gaspar, FAD

Length: 3 hours, 25 minutes

Executive Board Attendance

K. Georgieva, Chair

Executive Directors	**Alternate Executive Directors**
D. Mahlinza (AE)	
	S. Bah (AF), Temporary
G. Lopetegui (AG)	
N. Ray (AP)	
	B. Saraiva (BR)
	P. Sun (CC)
L. Villar (CE)	
L. Levonian (CO)	
	C. Just (EC)
H. de Villeroché (FF)	
	K. Merk (GR)
	M. Siriwardana (IN)
	F. Spadafora (IT), Temporary
T. Tanaka (JA)	
J. Mojarrad (MD)	
H. Beblawi (MI)	
A. De Lannoy (NE)	
	J. Sigurgeirsson (NO)
A. Mozhin (RU)	
M. Mouminah (SA)	
A. Mahasandana (ST)	
P. Inderbinen (SZ)	
S. Riach (UK)	
M. Rosen (US)	

J. Lin, Secretary
J. Morco / O. Vongthieres, Summing Up Officers
E. Mannefred / R. Smith Yee / V. Sola, Board Operations Officers
M. McKenzie, Verbatim Reporting Officer

Also Present
African Department: P. N'Diaye. Asia and Pacific Department: J. Ostry. Communications Department: C. Rosenberg. European Central Bank: D. Rakitzis, R. Rueffer. European Department: E. Detragiache. Fiscal Affairs Department: D. Amaglobeli, V. Gaspar, W. Lam, P. Mauro, C. Pattillo. Finance Department: A. Tweedie. Institute for Capacity Development: S. Coorey. Independent Evaluation Office: C. Collyns. Legal Department: R. Weeks-Brown.

Middle East and Central Asia Department: T. Koranchelian. Monetary and Capital Markets Department: T. Adrian, A. Ilyina, W. Kerry, F. Natalucci, C. Raddatz Kiefer, J. Vandenbussche. Office of Budget and Planning: D. Citrin. Office of Risk Management: V. Arora. Research Department: O. Celasun, M. Chivakul, L. Cubeddu Merchan, G. Gopinath, G. Milesi-Ferretti, M. Nabar. Strategy, Policy, and Review Department: N. Budina, R. Duttagupta, A. Iancu. Statistics Department: G. Quiros Romero. World Bank Group: M. Kose. Western Hemisphere Department: N. Chalk. Executive Director: R. von Kleist (GR). Alternate Executive Director: R. Alkhareif (SA), K. Chikada (JA), P. Fachada (BR), S. Geadah (MI), A. Guerra (CE), N. Heo (AP), I. Mannathoko (AE), A. McKiernan (CO), P. Moreno (CE), K. Obiora (AE), L. Palei (RU), V. Rashkovan (NE), D. Ronicle (UK), P. Rozan (FF), C. White (AP). Senior Advisors to Executive Directors: W. Abdelati (MI), Z. Abenoja (ST), B. Alhomaly (SA), P. Braeuer (GR), M. Choueiri (MI), J. Damgaard (NO), M. Gilliot (FF), R. Goyal (IN), G. Heim (SZ), L. Johnson (AP), N. Jost (NE), S. Keshava (SA), Y. Liu (CC), L. Marek (EC), R. Morales (AG), W. Nakunyada (AE), P. Pollard (US), C. Quaglierini (IT), C. Sassanpour (MD), J. Shin (AP), A. Tolstikov (RU), G. Vasishtha (CO), J. Weil (CO). Advisors to Executive Directors: M. Albert (FF), F. Al-Kohlany (MI), D. Andreicut (UK), A. Arevalo Arroyo (CE), K. Badsi (MD), O. Bayar (EC), E. Cartagena Guardado (CE), T. Chrimes (UK), J. Corvalan (AG), D. Crane (US), P. Dhillon (IN), O. Diakite (AF), S. Evjen (NO), K. Florestal (BR), I. Fragin (GR), J. Hanson (NE), H. Koh (GR), A. Korinthios (IT), U. Latu (ST), T. Manchev (NE), M. Mehmedi (EC), M. Merhi (MI), P. Mooney (CO), M. Mulas (CE), T. Nagase (JA), L. Nankunda (AF), B. Parkanyi (NE), A. Ribeiro Mateus (IT), N. Shenai (US), D. Shestakov (RU), M. Sylvester (CO), A. Urbanowska (SZ), D. Vogel (AG), S. Yoe (ST), Y. Zhao (CC), F. Antunes (BR), K. Lok (CC), J. Montero (CE), Y. Pierre (BR), A. Sode (FF).

1. WORLD ECONOMIC OUTLOOK; GLOBAL FINANCIAL STABILITY REPORT; FISCAL MONITOR

Mr. Sigurgeirsson, Mr. Evjen and Mr. Damgaard submitted the following statement:

We thank staff for the comprehensive set of flagship reports and the very interesting analytical work. We broadly share staff's analysis of the global economic outlook and would like to offer the following comments for emphasis.

Trade tensions between the United States and China continue to hurt global economic activity as uncertainties suppress business confidence, investments, and global trade. The very weak international trade in manufacturing goods clearly illustrates the detrimental effects of widespread uncertainty. The trade conflict between the United States and China could trigger a reassessment of financial risks, worsening market sentiments, and suppressing investments and consumption. Meanwhile, in the case of a downturn, there may be little policy space to respond. In light of the precarious outlook, we call for meaningful action.

The most effective stimulus to the global growth would be to resolve ongoing trade tensions and adhere to multilateral solutions and cooperation. Policymakers should cooperatively address the roots of dissatisfaction with the trade system, including by modernizing the WTO rules to include new areas such as digital trade.

In our view, staff seems somewhat optimistic in their 2020 growth projections. However, staff does stress that the projected up-tick is conditional on strong cyclical recovery in key emerging economies. A slowdown in aggregate demand in China, in part due to the macroeconomic consequences of increased trade and tech tensions, has contributed to weakness in global activity. We note that significant tail risks could materialize. Based on staff's simulations of the impact of tariffs, China's short-term output could fall by up to 2 percent if confidence, market reaction, and productivity effects are taken into account.

We broadly agree with staff that accommodative monetary policy remains appropriate to support the outlook. In many economies, however, scope to further ease monetary policy is currently limited. Continued expansionary monetary policy may also increase financial vulnerabilities. Although fiscal policy could be used as a complement to support growth, many countries are still struggling with elevated debt levels and need to build and ensure sufficient fiscal buffers. Full adherence to fiscal frameworks and a credible fiscal policy path are important for upholding market confidence.

We share staff's concern about subdued growth in many advanced economies due to structural factors such as an aging population and moderate productivity growth. Structural reforms to increase potential growth are vital. All countries have scope to undertake growth-enhancing structural reforms, including to increase the labor force, especially by stimulating female labor force participation and taking steps to promote employment among people at the margins of the labor market, including youth. Increased trade barriers and geopolitical tensions could take a toll on productivity growth through the disruption of supply chains and the buildup in financial vulnerabilities.

The fight against tax avoidance and evasion is important, and we believe that central roles for the IMF are to help individual members develop good tax systems, collecting capacity, and undertaking analytical work on taxation. In general, existing international principles for aligning taxation with value creation still serve the global economy well. Any reforms leading to new taxing rights should be limited and focused, and be preceded by a thorough impact and economic analysis.

We welcome the attention to the regional dimension of economic performance discussed in chapter 2. Although the size and scope of regional disparities differs across economies, the topic is important. We agree to the suggested policy actions to reduce the disparities and promote improved regional adjustment.

We welcome the focus in chapter 3 and agree that structural reforms are an essential part of the policy mix in all economies, particularly in emerging market and low-income economies. Reaping the benefits of structural reforms will require careful assessment of the timing, sequencing, and complementarity of reforms. In economies with large informal sectors, formalization of enterprises should be combined with access to domestic finance or social measures during structural transformation. Distributional, climate, and gender aspects of reforms should be carefully considered and analysed to achieve resilient and inclusive growth. Labor market reforms should be implemented while taking care to ensure decent working conditions. An adequate social safety net and facilitation of the transition to other jobs are important to support those adversely affected by reforms.

Governance reforms that improve the institutional setting and enhance performance are vital and can amplify gains from reforms in other areas.

Strong core institutions and sufficient implementation capacity are of crucial importance for structural reforms to succeed in low-income countries. Regrettably, there has been no noticeable improvement in governance in the average emerging market and developing economy in the past two decades. While tailoring Fund advice and lending program design should be based on country-specific contexts, it is essential that the IMF ensures equal treatment of members facing similar challenges.

We welcome the new IMF structural reform data set. It is critical to continuously monitor the short- and long-term impact of these reforms in order to correct course when necessary. Thus, we would welcome if the data set could be developed further. Does staff envision following up on de jure reforms to see if these were implemented and whether they were so successfully (i.e. what were the specific outcomes)?

Global Financial Stability Report

Signs of stretched valuations in some asset markets are a cause for concern, especially in light of high and rising indebtedness across countries and sectors. Financial conditions have eased further since the April 2019 GFSR. Although accommodative monetary policy supports the economy in the near term, an even longer period of low interest rates may further push investors to search for yield, continuing the buildup of vulnerabilities.

We underline the need to further strengthen macroprudential policy frameworks, including broad-based and more targeted prudential tools to limit financial vulnerabilities and mitigate systemic risks. Although lower interest rates have reduced debt service costs in the near term, higher indebtedness has made some sectors more susceptible to a sudden and sharp tightening in financial conditions. Excessive risk-taking, mispricing of risks, and debt sustainability should therefore be monitored closely. Policy response is urgent in areas where vulnerabilities are high or rising. While short-term vulnerabilities in the banking sector appear reasonably contained, we miss an assessment of the long-term implications of the lower growth and interest rate projections on the banking sector. Could staff comment?

We strongly agree with the overall assessment that corporate vulnerabilities should be closely monitored and urgently addressed. While noting differences across countries, the increasing use of debt for financial risk-taking of corporates in systemically important countries, as well as the exposure of both banks and non-bank financial institutions to the riskiest borrowers, is worrisome. We see improving disclosure at non-bank financial institutions and developing targeted macro-prudential tools toward highly leveraged firms as a step forward to ensure global financial stability.

Above all, a rollback of the financial regulatory reforms put in place after the global financial crisis ten years ago should be avoided. We underscore that despite the buildup of vulnerabilities, the global financial sector is much more resilient today precisely because of those regulatory reforms.

We welcome the work on increased risk-taking among institutional investors. We agree that a prolonged period of low interest rates may prompt institutional investors to seek riskier and more illiquid investments to earn their targeted return and that this may lead to a buildup of vulnerabilities. Furthermore, we welcome the attention to fixed income funds' ability to meet liquidity stress (Box 3.1) and take note that, on average, their liquid assets have declined during recent years thereby exposing a larger share of them to potential liquidity shortfalls in the event of large investor redemptions. It is also interesting to see that portfolio-similarities among funds seem to be increasing (Figure 3.2), and what implications this could have for the financial system as a whole. Is staff planning to conduct any further analysis of liquidity stress for other types of funds than fixed income funds?

We fully support the proposed policies to contain excessive buildup of debt and welcome the IMF's initiatives in these areas. Falling rates in advanced economies have supported debt portfolio flows to emerging markets. High and rising debt levels in many low-and middle-income countries, including in state-owned enterprises, is a concern and poses risks to debt sustainability. It is crucial that both borrowers and creditors take responsibility to ensure sustainable lending and borrowing practices. In addition, the IMF has a role to play in enhancing broader debt transparency and effective debt restructuring.

We welcome the analysis on non-US banks' USD funding and its implications for financial stability. The risk for non-US banks acquiring US funds in a large scale through wholesale markets was apparent during the global financial crisis. The reliance on foreign exchange swaps for non-US banks was also a cause of increased financial stress at the time. USD activities of non-US banks are now on par, or higher, than during the global financial crisis, which highlights the relevance of this topic. We welcome the discussion on how US dollar funding markets have evolved and the regulatory implications for these markets. We note positively that non-US banks USD liquidity ratio has improved since the global financial crisis.

We strongly support that the IMF is incorporating climate change into multilateral and bilateral surveillance, including as a risk factor in FSAP stress tests. We welcome the attention to sustainable finance and agree that losses from climate-related risks could affect the financial system. We also agree to the suggested policy actions to improve disclosure, data and risk analytics, and for central banks and supervisory authorities to incorporate climate-related financial risks into financial stability monitoring and assessment and into micro supervision.

Fiscal Monitor

We welcome that the IMF emphasizes the need for immediate action to meet the targets of the Paris Agreement. Unmitigated climate change could weaken growth over the medium term. All countries should therefore undertake efforts to both adapt to and mitigate climate change. The transition to low-carbon growth is a challenge faced by all countries and much can be done in designing the right incentives at the domestic and international levels. Sizeable investments are needed to transition to clean energy. Earlier mitigation efforts are likely to be less costly than those implemented down the line.

Economic instruments, such as taxes and emissions trading, are critical elements of any comprehensive mitigation strategy. The cross-country assessment indicates that mitigation costs of such instruments may in fact be lower than the environmental benefits – even before taking into account the climate benefits in nearly all the assessed countries.

We support the integration of the assessment of climate change mitigation policies into the Fund’s surveillance activity as part of the coming Comprehensive Surveillance Review and FSAP Review.

We agree with the IMF that a common international commitment to carbon pricing can reduce the economic efficiency costs as well as the free-rider problem. The idea of introducing an International Price Floor is interesting and one we believe should be explored further.

On a procedural note, we strongly encourage staff to make the reports available earlier before the discussion. The flagship reports and associated chapters always present highly relevant and useful analysis for our member governments. We understand the time constraints under which staff is working. However, it is important that we as stakeholders have adequate time to process and reflect on the analysis.

Mr. Ray submitted the following statement:

We thank staff for a suite of flagship reports with strong interconnecting threads in respect of trade tensions, the risks of policy missteps, deteriorating global sentiment, slowing growth, accommodative monetary policy, fiscal trade-offs and financial vulnerabilities. We also welcome the focus and firm messaging through the documents on climate change. We broadly share the staff's outlook.

World Economic Outlook

2019 and 2020

Global growth in 2019 is forecast to be the slowest it has been in a decade and projected to pick up more slowly in 2020 than in the April WEO. Trade growth is the slowest since 2012. We agree with staff's view that we are at a 'delicate juncture'.

Part of the slowdown is driven by moderating growth in a group of systemic economies – the US, Euro area, China and Japan. Some of the drivers for this are specific – a slow-down in automobile manufacturing resulting from new emissions standards, measures to rein in Chinese debt levels – which can at least partly be seen as positive when viewed through other lenses. But other drivers are broader – a slow-down in industrial output in the US, Euro area (and smaller advanced Asian economies), and weakening external demand in China.

In 2019, a further contribution comes from a group of distressed economies – Argentina, Iran, Turkey, Venezuela – that are facing difficult macroeconomic challenges but which are forecast to bounce back in 2020. A number of other large economies – India, Brazil, Russia, Mexico – also contribute to the 2019 slowdown and are now forecast to grow more slowly in 2020 than previously.

A bright spot remains the outsized contribution that Asia continues to make relative to the rest of the world, with growth rates, though lower than previously, still projected to be 5.9 percent in both 2019 and 2020.

Across much of this, trade tensions and geopolitical uncertainties are weighing on confidence and investment decisions.

Risks are weighted to the downside and include potential increases in trade tensions, a disorderly no-deal Brexit, persistently weak economic data and in the medium term, worryingly, the potential disruption of global supply chains, which would hit Asia particularly hard.

Growth in 2020 is forecast to pick up modestly. But given that the pickup relies on a turnaround in some of the most challenged economies to offset ongoing softness in systemic economies facing downside risks, we agree that the projected pickup is precarious.

Monetary policy

Monetary policy has played a significant role in cushioning the impact of the slowdown and supported financial market sentiment, but that has come with costs – rising financial vulnerability through rising asset prices, and less monetary policy space to respond to the next significant shock.

Policy responses

Against this backdrop we think that it is important that the Fund's policy recommendations are targeted to the specific issues in different places – for example, while critical, repairing the multilateral trading system will not in the short term assist the economies on which the projected rebound relies.

We do think policy makers should focus on avoiding further missteps, particularly on trade and exchange rate policy. A further round of trade tensions would likely trigger yet more accommodative monetary policy, soaking up valuable space and further fueling asset prices. That would seem particularly self-defeating. Avoiding these missteps would in turn have the benefit of reducing reliance on new, sometimes untested, macroprudential responses to financial vulnerabilities.

Where economies do require support, we support staff's view that authorities should look to fiscal policy where there is space, including slowing the pace of fiscal consolidation and debt reduction where this is prudent. Still, we caution the Fund against encouraging exhaustive use of discretionary fiscal policy to support growth. Debt levels remain high and continued emphasis should be placed on ensuring debt sustainability. Fiscal policy also has an important role to play in responding to critical policy challenges such as climate change, cyber risks, and technological change.

And of course, targeted structural reforms continue to provide the opportunity to drive productivity and lift growth.

Regional disparities

We welcome the analysis on regional disparities and agree that they can contribute to social and political tensions. We support the headline policy conclusions that investment in human capital plays a pivotal role in driving regional development, and that active labor market policies can help lift-up lagging regions and ease adjustment. While broad-based economic policies can work towards fostering greater economic participation and productivity, regions' industrial structures do reflect regional characteristics – historic and geographic as well as economic – and these starting points will affect the responses from individuals and firms as well as appropriate policy responses. We also strike a cautionary note in regard to some aspects of the analysis: we note the chapter's acknowledgement that the regional unit of analysis is vastly different across countries and that alternative levels of geographic aggregation could generate different findings; we also note that the results do not appear to work well for countries with significant natural resource endowments.

Structural policy and reform patterns in emerging markets

We welcome the data set and appreciate the analysis on structural reform patterns in emerging markets. We agree that structural reforms can lift potential growth and note in particular the critical role of good governance (strong institutions and property rights) and access to credit as foundations for other reforms. But, in our experience, the context in which reform takes place is frequently more complex than the early/late, good times/bad times dimensions presented in the chapter: further, in practice it can be hard to delineate between good times and bad, and tough structural reforms are politically difficult to implement irrespective of economic conditions.

Global Financial Stability Report

We note with concern the elevated levels of corporate debt in several major economies and the exposure of some banks to these firms. We also note staff's view that authorities should be mindful of the risks of shifting vulnerabilities from banks to nonbank financial institutions and of exacerbating regulatory arbitrage. It is timely advice that policymakers should consider broadening assessment and regulatory frameworks to cover these risks.

We understand that riskier and more illiquid investments by institutional investors may promote a further buildup of vulnerabilities, while portfolio similarities may amplify market sell-offs in the event of adverse shocks. These issues cannot be solved easily given the expected future trend of aging and low interest rates in many advanced countries and the suggested policy actions on p61 don't seem to be strong enough to prevent future risks triggered by global-scale shocks. How could further multilateral cooperation on this matter assist?

We welcome the chapter on banks' US dollar funding as a good example of coverage of financial spillovers in multilateral surveillance, in line with the call for additional work in this area in the recent IEO evaluation on unconventional monetary policy.

It is important these issues are presented in a balanced way – as highlighted, use of US dollar funding has positive implications – it supports the efficient allocation of global liquidity and facilitation of financing flows to emerging markets, and there are ways for individual banks to manage the rollover risk, for example.

We agree that regulators should continue to monitor US dollar funding issues and where necessary develop or enhance currency specific liquidity risk frameworks (such as Korea's foreign currency liquidity coverage ratio (LCF) introduced in 2017). We also agree that international reserves can play a stabilizing role in the event of stress in US funding markets, while noting the signaling effect of swap lines accessing US dollar liquidity.

This chapter also highlights the importance of a stronger global financial safety net (GFSN), including US dollar swap lines and an adequately resourced IMF with the appropriate toolkit. Earlier work has shown that important gaps remain in the GFSN and that the IMF lending toolkit does not adequately meet the needs of the broader membership, especially those members without standing access to reserve currency central bank swap lines. We look forward to finding future opportunities for the Board to consider the toolkit, particularly in respect of precautionary lending.

Fiscal Monitor

Climate change is a macro-critical issue for many countries and an existential threat to some Pacific Island countries in our constituency. We welcome the Fiscal Monitor's focus on climate change: adding the Fund's voice to the climate change discussion in the areas of fiscal, monetary and financial policy (where the Fund has particular expertise) can enrich the understanding of mitigation policies that are both optimal and acceptable to stakeholders.

We note the different tools that are available to mitigate global emissions and agree that finance ministers are key players in the race to stabilize temperatures. We agree that carbon pricing is an efficient and direct way to curb emissions, however, other instruments – such as regulation or climate finance – also have significant potential mitigation benefits. We acknowledge many of the advantages of a carbon tax as set out in the paper but stress the need for domestic authorities to have the flexibility to choose instruments best suited to local conditions, both economic and political. Do staff have any plans to complement this work by looking at the effectiveness of incentives for, and financing of, carbon sequestration and capture and storage.

The price scenario work in the Fiscal Monitor suggests the scale of the mitigation challenge globally, though we think it could benefit from more work to reflect comprehensively the situation of individual countries. Nevertheless, over time, the carbon price will need to rise globally. In respect of a global carbon price floor, we continue to maintain that this raises issues of equitable burden sharing that may undermine the Paris Agreement's bottom up approach of countries setting Nationally Determined Contributions (NDCs).

Process

While we appreciate the amount of work required to pull the flagship reports together, a number of documents were, once again, circulated very late. These delays undermine the opportunity for meaningful input from authorities and the Board.

Ms. Riach, Mr. Ronicle, Ms. Andreicut, Mr. Chrimes, Mr. Haydon and Ms. Nelson submitted the following statement:

Policy missteps threaten the global expansion. This set of flagship reports clearly and urgently make the case for de-escalating trade disputes and planning for further policy easing. They identify a number of emerging financial vulnerabilities that policymakers should look to tackle. Despite significant near-term challenges, long-term structural issues, especially climate change, are covered in some detail – an issue we hope to see given even greater prominence across the Fund's work in coming years.

Avoiding a downturn

Trade tensions have risen since the spring, pushing down on demand by weakening trade flows and raising uncertainty. A further escalation of tensions is an important downside risk to the forecast over both the short and medium term. Box 2 of the WEO illustrates the consequences well. The flagship reports rightly acknowledge the multifaceted drivers of weaker demand, including: geopolitical issues; a slowing in Chinese demand – in part due to welcome rebalancing and de-risking efforts; global weakness in the automotive sector; and significant, largely idiosyncratic, stresses in a set of emerging markets. The WEO forecast assumes an orderly withdrawal of the UK from the European Union, although we note the report's comments on the uncertainty over the Brexit outcome. The UK continues to work closely with our European partners in seeking an agreement on the UK's withdrawal from the European Union.

The pickup in growth in 2020 seems precarious, with the central forecast contingent on a recovery, or reduced rate of contraction, in emerging markets currently facing challenging conditions. More broadly, financial conditions in emerging markets remain accommodative relative to the second half of 2018, even if capital flows remain volatile. Tighter financial conditions could result in renewed emerging market economy stress, amplified by their increased reliance on market-based financing. Renewed commodity price uncertainty could also have particular impacts on some vulnerable emerging markets.

The appropriate policy prescription is clearly set out by staff: enhanced multilateral cooperation is needed to tackle key threats to global growth – from trade tensions to climate change. The most important near-term adjustment policymakers could make would be to diffuse trade tensions, a man-made cause of much of the slowdown. We reaffirm our longstanding commitment to market-determined exchange rates that reflect underlying economic fundamentals, to avoid persistent exchange rate misalignments and to refrain from competitive devaluations.

Monetary policy continues to be the first port of call for sustaining the expansion. As the GFSR makes clear, the recent easing in financial conditions has helped narrow the distribution of growth outcomes around a declining central case. Active macroprudential policy can help guard against emerging financial stability risks, as will completing and implementing the global regulatory reform agenda. We were struck by the absence of macroprudential tools in some jurisdictions, as well as by the missing frameworks in others (GFSR Table 1.1); progress in this area seems essential if ongoing policy accommodation is needed to support the expansion.

But monetary conditions are already accommodative and the ongoing decline in equilibrium interest rates is eroding remaining policy space, against a backdrop of often below target inflation and declining inflation expectations. Robust labor markets and household confidence have softened the effect of weakening business confidence, though it is unclear how long this can be sustained. We therefore welcome the staff assessment that, contingent on fiscal space, fiscal policy should play a more active role.

Tackling vulnerabilities

Sustained accommodative financial conditions risk supporting "search for yield" behaviors in the financial system. Staff have ably used the new flexible GFSR format to hone in on a number of the most significant emerging vulnerabilities.

We find staff's Growth-at-Risk analysis a powerful tool for assessing the overall state of financial sector risks. We particularly appreciated seeing results based on both financial conditions indices and vulnerability indicator; we worry that results based only on a financial conditions index (e.g. GFSR Figure 1.8) may be missing important medium-term dynamics such a credit growth, house price growth and external imbalances. We encourage staff to consistently use both metrics going forward. We also wonder whether staff had considered factoring into their analysis indicators of resilience such as bank capital.

We welcome staff's focus on LIBOR and the transition to the adoption of alternative risk-free rates (GFSR Box 1.3). Existing benchmarks are fragile and there are significant risks in a continued systemic reliance on LIBOR. While there are pockets of good progress, including in the UK, it is right to emphasize the importance of maintaining momentum. The draft text would benefit from a greater emphasis on the benefits of moving away from existing benchmarks: as drafted, staff may be misinterpreted as being unsupportive of transition. We look forward to seeing revised text in the final draft.

We support calls for addressing the corporate vulnerabilities that have emerged in recent years, particularly given the findings of the debt-at-risk analysis. Greater disclosure of the financial exposures of non-bank financial institutions would help identify and monitor risks, allowing policymakers to focus on those jurisdictions where the risks are highest (rather than where the reporting is most transparent). Regulators should also look to conduct targeted stress tests in this area. Nevertheless, we recognise that policy tools for tackling corporate vulnerabilities remain limited and see this as an area that would benefit from further attention.

We agree with staff that persistently low interest rates may prompt institutional investors to seek riskier and more illiquid investments, which in turn may increase vulnerabilities and impact financial stability. We were therefore pleased to see coverage of the rising portfolio similarities and lower credit quality among institutional investors. This analysis could be usefully complemented by covering structural issues such as liquidity mismatch; non-bank investors hold significant portions of outstanding leveraged loans and it is unclear how quickly these loans could be sold in a period of stress without affecting market prices. As a result, large-scale redemptions from open-ended funds could amplify price calls. The Bank of England and Financial Conduct Authority are reviewing potential actions to align redemption terms with the typical time it takes to realise market prices in both normal and stressed conditions.

Low interest rates are also contributing to volatile capital flows to emerging and frontier markets; this is a topic of ongoing relevance, not least given the Integrated Policy Framework and the upcoming IEO evaluation of advice on capital flows. We share staff concerns that, in the event of a sharp tightening in global financial conditions, increased borrowing costs could raise rollover and debt sustainability risks. While we support staff recommendations for domestic policy solutions, we also reiterate the importance of collective responsibility for emerging vulnerabilities. These risks reinforce the importance of ensuring a well-resourced IMF at the center of the Global Financial Safety Net.

Addressing long-term challenges

We welcome the comprehensive analysis in the Fiscal Monitor of how to mitigate climate change. It is an excellent example of the work that the Fund should be doing on this topic. We support the conclusion that carbon pricing is an important fiscal lever for achieving emissions reductions, as our own experience implementing a carbon price floor demonstrates. We strongly encourage staff and management to build on this work by using these analytical tools to systematically assess climate policies in Article IV reports. We support the integration of the assessment of climate change mitigation policies into the Fund's surveillance activity as part of the coming Comprehensive Surveillance Review and FSAP Review.

We were pleased to see the climate theme also picked up in the GFSR chapter on Economic, Social and Governance (ESG) issues. As set out by staff, ESG-related disclosures remain fragmented and sparse, which in turn makes it harder to integrate sustainability considerations into business decisions. We agree that policymakers have a role to play in developing standards, fostering disclosure and transparency, and that multilateral cooperation is of the essence. But climate issues are wider than just ESG; one important area which could be considered in future work, is how banks and insurers manage financial risks from climate change. The Bank of England has set out comprehensive expectations for how firms manage such risks and plans to run a system-wide stress test next year to check the resilience of the UK financial system to climate change. Our authorities welcome Fund plans to incorporate climate risks into FSAP stress testing.

Regional disparities are a challenge in much of the membership and the WEO chapter lands some important analytical messages. The conclusion that the sectoral mix matters little, whereas differences in productivity within sectors across regions matters more, is striking. Our understanding of the wider literature suggests that differences in the quality of factors of production – and skills in particular – play an important part in regional differences. The box on place-based policies does not mention risks related to displacement, which other research suggests may be significant. Is this something staff have considered?

We were pleased to note that convergence prospects look good for many sub-Saharan African countries, and thought this was a valuable addition to the WEO. Nevertheless, as the report makes clear, many emerging market and developing economies, including a collection of economies with a combined population close to one billion, in fact look set to fall further behind advanced economies. This strengthens the urgency behind a further push for structural reforms in EMDEs, as advocated by staff. We agree that there remains much to be gained from further reforms, particularly in Sub-Saharan Africa and the Middle East & North Africa, where the pace of reforms has generally lagged behind those in Emerging Europe and Latin America and where a number of recent elections create opportunity for change. We look forward to discussing these issues further shortly after the Annual Meetings in response to the 2019 report on Macroeconomic Developments and Prospects in Low Income Countries.

Mr. Raghani, Mr. Nguema-Affane, Mr. N'Sonde and Mr. Diakite submitted the following statement:

We thank staff for the quality of their set of reports, including relevant analytical chapters which come at a sensitive moment where the challenges and uncertainty facing the world economy are at a record high, and the risks are also tremendously elevated. This situation requires a great degree of candor and strong messages to policymakers.

World Economic Outlook

At the outset, we note that the Executive Summary of the WEO does not do justice to the content of the report regarding the outlook and prospects for low-income countries and other developing countries. There are key takeaways to be drawn from the report itself related to the overall growth resilience in those countries amid a very challenging external environment. There are also disparities of circumstances, performance and priorities within this group between commodity exporters, non-commodity exporters, diversified economies and "frontier" economies. We would expect the published Executive Summary to be more inclusive and reflect the diversity of country income levels.

The main chapter of the report (Chapter 1) makes evident that the global economic activity is getting even weaker than six months ago, with some sectors such as manufacturing falling to levels reminiscent of the last global recession albeit more resilient sectors such as services. This takes place in an environment of sustained excess external imbalances as well as increasing trade and geopolitical tensions, which are impacting significantly business confidence, investment and global trade. The situation could be even bleaker if not for the monetary policy accommodation being taken or signaled by several central banks. The softening impact of the latter on financial market sentiment and activity cannot conceal the difficulties in the real economy. In addition, risks are multiple and significant, which add to the possibility of a severe downturn.

We welcome the full recognition of climate change as a significant risk to the global economy given its macroeconomic impact on many countries, particularly islands, small states, and low-income countries. The apparent failing of domestic mitigation strategies due to insufficient resources and consistent implementation, and the stalled international cooperation to address this durable challenge with high humanitarian costs increase the difficulties of mitigating the adverse effects of climate change.

All in all, the global economic outlook appears precarious. While care should be given to not sending alarming signals to markets and investors, the WEO report should be as candid as possible and ensure that its main messages are properly communicated to policymakers as policy action has been sub-par or even reinforcing difficulties. The report seems to lack decisiveness in this regard and fails to capture the change in the degree of urgency, for example referring to “precarious outlook” at times and, in other instances, to a global economy barely “remaining at a “delicate juncture”.

We note that the global growth projections for 2019 and 2020 are revised downward, with most advanced, emerging and developing countries experiencing this negative change. This, once again, raises the question of the realism of projection assumptions. For instance, while recognizing that the world economy faces difficult headwinds over the forecast horizon, the report still projects growth over 2021-2024 at 3.6 percent, slightly above that of 2020, on the assumption of durable normalization in emerging market and developing countries (EMDEs) of which some experience difficulties, and this in spite of projected growth in the advanced economy group at around 1.6 percent. This would imply a shift of weights in the global economy toward those EMDEs in significant proportions, which should be better substantiated.

The growth figures for sub-Saharan Africa (SSA) show a slight slowdown, driven by the sluggish outlook in the three largest economies. The overall figures however hide significant growth performance in the bulk of countries, including a rebound in commodity exporters that were sharply affected by the price shocks of recent years. However, what is most worrisome is the contraction of per capita GDP growth, which undermines at least part of the gains achieved in the last two decades. The projected bounce in SSA growth over the longer term to 4.2 percent by 2024 might not be sufficient to reverse this negative per capita GDP deceleration, and the WEO could make a stronger case in flagging this challenge.

We agree that priority now should be on lowering trade tensions by rolling back recent bilateral tariff increases, resolving the challenges and uncertainty stemming from Brexit, advancing multilateral resolution of trade disputes and enhancing international trading system within the framework of a stronger World Trade Organization (WTO). The call for greater multilateralism also remains relevant for tackling international taxation issues, illicit finance as well as climate change, notably by curbing greenhouse emissions and mitigating the impact of global warming.

The WEO makes excellent cases on policy prescriptions. The menu of macroeconomic and macroprudential policies laid out in the report is adequate. We agree that macroeconomic policy mix should be geared at supporting economic activity as needed while tackling fiscal vulnerabilities and reducing excess external imbalances. We also agree on the need to address financial vulnerabilities, including those stemming from monetary policy accommodation, notably through macro-prudential measures, completion of the financial regulatory agenda to increase resilience, and the strengthening of the global financial safety net to adequately respond to disruptive financial flows. This, coupled with financial inclusion policies, should help make growth more inclusive. Fiscal policy should be supportive where there is space and growth developments warrant it. Where there is little or no space, fiscal consolidation should remain as growth-friendly as possible, mindful of fiscal multipliers and attentive of country specific circumstances such as infrastructure gaps. While structural reforms should be tailored to country conditions, they should aim at increasing labor market participation, raising potential output and promoting inclusiveness.

Regarding inclusiveness, Chapter 2 of the WEO presents patterns in regional economic disparities--in terms of output, employment and productivity—at the subnational level in advanced economies. It also recommends a set of interesting labor market, product market and fiscal reforms to close those gaps. Some of the remedies can also be applicable to developing countries, notably improving educational and training quality and boosting learning outcomes in lagging regions, as well implementing place-based fiscal policies and investments. Fiscal decentralization can also contribute to reducing gaps, provided that appropriate capacities are established.

Policymakers in low-income countries continue to face additional challenges arising notably from the need to strengthen institutional and policy frameworks and build capacity. Among those, commodity-exporting developing countries must also secure economic diversification away from resources extraction and structurally transform their economies.

We welcome the analytical Chapter 3 of the WEO which highlights structural policy and reform patterns in EMDCs—in the areas of domestic and external finance, international trade, labor and product market regulations, and governance---as well as their differentiated macroeconomic effects, with a view to drawing lessons to buttress more dynamic growth. We agree on the need to carefully tailor reforms to country circumstances, including political-economy factors, to maximize their payoffs. Adequate timing, prioritizing, sequencing and pacing of structural reforms also carry weight.

Global Financial Stability Report

Financial conditions eased since April 2019 as major central banks pursued an accommodative monetary policy amid a global economic downturn exacerbated by persistent trade tensions. While supportive financial conditions have helped reduce near-term risks to financial stability, financial vulnerabilities have risen as debt of nonbank institutions and emerging and frontier markets has increased. We very much welcome the analytical Chapter 4 on the debt of emerging and frontier markets. The section on the growing and less productive debt of SOEs in emerging markets is very insightful. We look forward to a similar analysis on the debt of SOEs in frontier markets.

The staff analysis indicates that the search-for-yield flows to emerging and frontier markets have been driven by external factors rather than domestic factors, which leaves countries, especially those with asset overvaluation, vulnerable to capital flow reversals. Furthermore, the interesting analytical Chapter 5 on US banks' dollar funding shows that emerging and frontier markets would be particularly vulnerable to a regulatory and supervisory tightening of dollar funding in the home countries of non-US banks engaged in cross-border dollar lending. Given all that, could staff elaborate on the extent to which improvement in domestic factors could reduce risks of capital outflows in case financial conditions tighten?

We agree with staff recommendation to implement sovereign debt management practices and frameworks going forward, especially given the increasing share of external creditors in public debt. We note that the increased investors' risk appetite for emerging and frontier markets bonds contributed to support bond issuances and narrowing credit spreads while stretching valuation of some assets from lower-rated bond issuers. Would staff recommend those countries, notably frontier markets, to seize the opportunities offered by these developments to pursue a more active liability management to lower debt service costs and improve profile?

We also note from Chapter 5 that US dollar funding conditions depend on changes in US policies and financial sector regulations in home economies. Tighter dollar funding conditions could affect recipient economies through reduced availability of US dollar funding and be amplified by the level of fragility of non-US banks in home economies. This reinforces the role of the IMF in the global safety net by offering access to resources when dollar funding is constrained due to higher dollar liquidity conditions. We welcome the development of new indicators to monitor US dollar funding exposure, liquidity and stability of non-US banks. We also appreciate the proposed new indicator monitoring US dollar funding costs and the identification of the determinants of such costs. Staff comments on how those indicators perform retrospectively would be welcome

We see merit in the analytical Chapter 6 on the link between sustainable finance and financial stability. We note the increasing consideration and integration of environmental, social and governance (ESG) principles in many portfolio investments. Could staff indicate if frontier markets' international sovereign issuances are ESG-compliant? At the same time, the potential benefits from ESG-linked investment compared to conventional investment is yet to stand out, reflecting probably the infancy of compliance with ESG principles. We take good note of the challenges faced by ESG investors and issuers, including lack of standardized and transparent assessments. We welcome ongoing international initiatives to improve ESG definition, reporting, and standardization of compliance assessment. We would appreciate staff elaboration on IMF's potential role in this regard?

Fiscal Monitor

We welcome the themes analyzed in the October 2019 Fiscal Monitor. We support the call for an urgent action as the window of opportunity to bring down carbon dioxide emissions to manageable levels is shrinking, and that mitigation costs will rise as policy inaction continues. As climate change can have serious macroeconomic consequences, impair sustainable development, and carry spillovers such as migration with potential macro-critical impact, mitigating its effects falls within the mandate of the Fund. We particularly appreciate the focus of the report on addressing this multidimensional challenge from a public finance perspective.

Changing the system of incentives is crucial to address the negative externalities associated with the consumption of fossil fuels, both domestically and at the international level. Well-designed fiscal policies play an important role in influencing behaviors of firms and households, and we broadly agree with the recommendations made in this regard to ensure the transition to cleaner and more efficient sources of energy while sustaining economic growth. We are also of the view that carbon taxes are an efficient tool to increase the most the costs for firms and households of not reducing fossil fuel emissions. Carbon taxes are also revenue-enhancing for public finances, and easier to administrate in the context of existing fossil fuel taxes or regimes for extractive industries.

That said, the design of carbon pricing must take into account country-specific circumstances which determine whether carbon tax is regressive, distribution-neutral or progressive. The paper's country examples are illustrative in this regard. Carbon pricing also needs to address the tradeoff between economic efficiency and social equity. The issue of how to use the additional revenue generated by carbon taxes is a key consideration for the political and social acceptability of this measure. Several options are possible in this regard. The revenue generated by carbon taxes could be used to reduce some current taxes such as on labor or income, increase spending on health and education, social protection, or public infrastructure. It is important that the ways in which carbon tax revenues are used, contribute to increasing economic efficiency, redistributing income and reducing inequality. In this sense, we welcome the paper's analysis of the impact of carbon pricing revenue on income distribution and the measures proposed to protect vulnerable segments of the population.

On the issue of international cooperation , we are also of the view that global mitigation targets should be ambitious considering the climate change threats confronting the global economy. In this regard, while the Paris Agreement has been instrumental in providing a framework for such cooperation, it will be important that additional efforts be made to enhance global mitigation initiatives beyond those currently pledged. As with domestic considerations, there are winners and losers and there needs to be shared benefits among nations to foster international cooperation. In this respect, the implementation of an international carbon price floor is an interesting proposition as it promotes an effective coordinated global approach to address a common challenge. Another concern that international cooperation should address is to upgrade capacity development in low-income countries to use fiscal policy towards reducing emissions and building resilience against climate change.

Mr. de Villeroché, Mr. Rozan, Ms. Gilliot, Mr. Bouvet and Mr. Sode submitted the following statement:

We thank staff for the excellent set of flagship reports. The ongoing broad-based global slowdown, the rising downside risks and the materialization of some of them since the last World Economic Outlook are worrying developments that warrant particular attention from the Fund and policymakers alike. This difficult environment calls for a careful calibration of the policy mix, including by using policy space where it exists, a renewed commitment to multilateral cooperation, the upholding of a strong financial oversight and domestic reforms to foster growth inclusiveness and sustainability. In addition, the very adequate choice of analytical chapters provides valuable contributions in a complex environment. The integration of these perspectives into the Fund's surveillance work will bring much value added going forward, in particular on inequalities, structural reforms and climate policies.

In a context of rising downside risks, adopting a policy mix that supports growth in the short term while enhancing medium term resilience appears necessary.

We broadly concur with staff's analysis regarding the weakening of short-term economic outlook and share the main areas of concern regarding downside risks. The materialization of geopolitical risks in the Middle East, as well as the possibility of a disorderly Brexit, add to this grim outlook. We particularly thank staff for its analytical box 1.4 on the measure of output gaps. This alternative theory of the business cycle could help explain low inflation dynamic in advanced economies and change our assessment of the cyclical position of several countries. This is particularly significant for the euro area where fiscal policy is underpinned by the measurement of output gaps and where the increase in trend unemployment could be explained by a lack of sufficiently countercyclical policies in the past[1]. We encourage staff to further work on this issue with specific attention given to euro area countries. Two important open questions at this stage are whether the underlying factors behind the industrial sector slowdown are temporary or more permanent, and whether this slowdown will spill over to the service sector and to households' confidence. Staff elaboration are welcome.

We support staff's call for a rebalancing of the policy mix toward a more active use of fiscal policy. In the face of limited room for further monetary easing, fiscal policy will need to play a greater role to support growth and inflation, first and foremost in countries with ample fiscal buffers. More broadly, the significant compression of long-term interest rates has raised fiscal space in most advanced economies, which reinforces the case for a stronger public investment. Going forward, staff should pay greater attention to the timing, composition, scale and duration of potential fiscal stimulus

[1] See for instance Fatás, 2018: "Fiscal Policy, Potential Output and the Shifting Goalposts"; which warns about the risk of a potential doom loop between pessimistic output gap estimates and fiscal policy.

trying to draw lessons from past episodes. Does staff already have some recommendations on these issues, as well as on the best governance arrangements to design and implement such plans? In addition, the risks linked to the low level of inflation, and in particular, its impact on the efficiency of the monetary policy, warrant further analysis.

While we welcome the upward revision of growth forecasts for 2020 in the United States, we encourage the authorities to focus on reforms that would foster social inclusiveness and environmental sustainability. The risk management approach chosen by the Fed is commendable but calls for a renewed vigilance in terms of financial supervision to avoid excessive risk building. Strengthening the oversight of non-bank financial institutions and proactively using macroprudential tools is crucial in this regard. In addition, we reiterate our encouragements to the authorities to raise the revenue-to-GDP ratio to slow the dynamic of debt and create fiscal space to enhance redistribution and invest in human and physical capital.

In the euro area, we fully concur with staff's call for a more active role of fiscal policy to complement monetary policy. The case to raise public investment in countries experiencing a growth slowdown and whose public debt is low while their current account is high is overwhelmingly strong. Moreover, we concur with staff that, should growth further slowdown, a synchronized fiscal response, although differentiated across countries, will be needed. In this regard, a common fiscal instrument, complete with a stabilization function, would allow for a more optimal policy mix in the euro area. While the clean-up of the banking sector balance sheets is well advanced, completing the banking and capital market unions should now be the priority, so as to improve risk sharing. In the meantime, long term growth should be supported by structural reforms, the modernization of social safety nets, investments in skills at all ages and an active promotion of innovation. Reducing current account imbalances is also crucial for a well-functioning currency area. In this regard, we encourage staff to closely monitor wage developments and to make clear recommendations to reduce excessive external imbalances.

Large emerging and developing economies are facing a difficult external environment and some of them still deal with significant internal imbalances. We fully concur with staff that the main policy objective in China remains to raise the sustainability and quality of growth. Measures to cushion against the negative impact of trade tensions should be compatible with the key priorities of reducing financial risks, improving resource allocation and increasing domestic consumption. Better SOE governance, improving the level playing field for private companies and scaling back widespread implicit public guarantees will simultaneously reduce tensions with international partners and strengthen medium term growth prospects. In India, the authorities should seize the window of opportunities provided to undertake ambitious reforms, notably concerning the governance of public sector banks and the regulation of the labor market. We fully concur with staff's main policy recommendations for Turkey and with the concluding statement of its recent Article IV mission. We notably encourage the authorities to adopt a tight monetary policy until inflation is back to its target.

While growth patterns in low income countries are heterogenous, a high number of countries continues to face severe development challenges, and the convergence prospects remain particularly subdued. While attention needs to be paid to debt sustainability concerns, we concur with staff that it is key to find fiscal space for the necessary investments to support progress toward the SDGs and to protect the most vulnerable. The IMF is a key partner for the capacity development of these countries and we expect staff to further strengthen its technical assistance in LICs, notably through close cooperation with the World Bank. Could staff reflect on the next steps concerning the strengthening of its capacity development activities with LICs? We agree with staff that some LICs will be on the front line regarding the consequences of climate change and we encourage staff to step up its engagement on climate adaptation.

More particularly, growth developments in the MENA and sub-Saharan regions appear lackluster and threaten the long-term objective of income convergence. In many MENA countries, subdued growth prospects make it very difficult to balance fiscal objectives (in the face of elevated debt levels) and social aspirations, and make the case for stronger efforts to support the private sector, growth-enhancing fiscal policies and good governance even more urgent. In sub-Saharan Africa, while some countries are experiencing solid growth, this is not the case for key large economies, namely South Africa, Angola and Nigeria. Overall, subdued real per capita growth and strong headwinds in some countries, there is a risk of falling further behind. Therefore, we underline the importance of staff's attention to this region, given its particular challenges, to support stable and robust economic growth and help countries reach the SDGs.

Global cooperation and domestic reforms that support inclusive and sustainable growth models are crucial to improve the global economic outlook.

Persistent and still unresolved trade tensions should be dealt with multilateral and rules-based mechanisms, in an inclusive manner. Multilateral cooperation remains the best answer to underlying tensions and we caution against bilateral agreements that could create new distortions. To prevent such adverse developments, the European Union has made concrete proposals to modernize the WTO and to strengthen the rules-based multilateral trading system. Cooperation in the fields of technology, data protection and intellectual property is also essential. The Fund's advocacy and analytical work is key to help defuse tensions. In parallel, we encourage all countries to adopt macroeconomic policies that reduce external imbalances, since these macroeconomic imbalances are the main source of multilateral and bilateral trade imbalances.

Rising income inequality and the feeling that tax systems are not putting each player on an equal footing are feeding resentment. While within countries inequalities of income and wealth have significantly risen these last four decades, reforms that enhance equality of opportunities (notably human capital investment) and strengthen social safety nets are of paramount importance. On the revenue side, most countries have room to increase tax revenue and to make their tax systems more progressive. Tackling tax evasion, profit shifting and harmful tax competition, which hamper efforts to mobilize the revenues needed to finance domestic public goods, is a priority. The recent article in Finance & Development on phantom investments once again shows that tax arrangements developed by some jurisdictions undermine tax collection in advanced, emerging market, and developing economies. We encourage staff to further integrate the spillovers of tax competition in bilateral and multilateral surveillance, notably through regular follow-ups in the Fiscal monitor.

The issue of growing regional disparities tackled by the WEO's Chapter 2 has deep consequences for policy makers. We welcome this analysis and recommendations and encourage staff to continue its work and to more frequently integrate this dimension in its bilateral surveillance. Agglomeration effects related to higher concentration of economic activity and higher specialization have ambiguous effects, raising overall productivity but creating an unequal geographic repartition of growth. These effects can be compounded in lagging regions by the impact of regional shocks. However, the key takeaway from staff analysis is that national and regional policies have the potential to dampen regional disparities. Human capital policies, such as education and active labor market policies, have indeed a pivotal role while labor and product markets policies are also important. We encourage staff to further work on the usefulness of place-based policy and the conditions for their success. Lastly, while regional real GDP per capita remains the best measure for assessing the extent and evolution of regional differences in economic activity, it captures inadequately social welfare and standards of living. In the case of France, regional dispersions of GDP per capita and income per capita since 1980 show different paths, with a stabilization in terms of income per capita thanks to the role of social benefits, taxation and pension system. We encourage staff to carry out further research on the role of tax and benefit system on regional disparities.

The Fiscal Monitor chapter on climate mitigation policies is a timely and valuable contribution. Staff efforts to gather key climate change data, build a new methodological tool to project carbon emissions and discuss policy solutions are impressive. Through its technical expertise and global membership, the IMF is in a unique position to contribute to the climate change mitigation policy discussion. As expressed by other chairs in their gray, we strongly encourage staff and management to further build on this work by regularly updating this exercise in flagship reports and using the analytical tools to systematically assess climate policies in Article IV reports. We support the integration of the assessment of climate change mitigation policies into the Fund’s surveillance activity as part of the coming Comprehensive Surveillance Review and FSAP Review. We also encourage staff to have in-depth discussions of possible policies to reduce emissions in Articles IV of the biggest carbon emitters. On substance, we very much agree with staff’s view that carbon pricing is a key instrument for climate change mitigation, but we also appreciate staff work on complementary policy instruments. We encourage further work both in terms of type of emissions covered and policy instruments. We also thank staff for its contribution on the political economy of carbon pricing and on potential use of revenues from such taxes. Staff results need to be communicated to policy makers and public opinions to allow for an informed debate. Lastly, we encourage staff to further work on potential mechanism to incentivize international cooperation on climate change including on the idea of a border adjustment tax.

The analysis in chapter 3 of the WEO on the potential benefits of structural reforms in emerging markets and low-income economies is promising. Staff’s analysis makes the case for a deepening of structural reforms, as efforts in this regard have somewhat faded and much scope remains for further reforms. While endorsing staff’s advocacy for structural reforms, we underscore that careful assessment of timing, sequencing and scope of deregulation reforms are warranted, since they can also trigger short-term economic and social disruptions that must therefore be factored in and mitigated. Enhanced social safety nets or stronger fiscal stimulus are particularly useful, in particular when reforms are implemented at the bottom of the economic cycle. We welcome the focus placed on good governance, which is key to reap the benefits of structural reforms. In that sense, this analysis is a useful continuation to last April's Fiscal monitor on corruption. Finally, although acknowledging that low availability of data is a challenge, we regret that this work only addresses reforms linked with the functioning of markets and that human capital-enhancing structural reforms remain out of scope.

The large and broad-based monetary easing of the last few months warrants a close oversight of financial risks and the mobilization of the macroprudential instruments where needed.

We generally share the assessment of the key vulnerabilities in the global financial system as well as the policy recommendations focused on the strengthening of the supervisory and macroprudential framework. The more accommodative monetary policy stance is justified to counter the weakening economic activity. Still, easing financial conditions may contribute to the accumulation of financial system vulnerabilities, and preventive actions appear critical. At this stage, investors are possibly more complacent to downward risks, as they anticipate financial conditions to be durably accommodative. In this regard, we would welcome staff comments on how to balance short-term growth support and long-term financial stability, beyond the use of macroprudential measures. Tightening macroprudential policies and enhancing macroprudential tools is warranted. French monetary authorities have remained fully involved in the monitoring of nonfinancial corporates' balance sheets, with an increase in the Countercyclical Capital buffer that will come into force next April. Targeted measures have also been implemented to limit systemic banks' exposures to heavily indebted large nonfinancial companies. Finally, and contrary to the 2019 FSAP for France published in July, the calculation of debt-at-risk for French nonfinancial firms is based on an aggregate corporate debt including intercompany loans which does not make a lot of sense economically and may result in contradictory findings.

Higher demand for risky assets from institutional investors has translated into an increase in duration and credit risks leaving policymakers with the challenge of striking the right balance between risk sensitivity mitigation, heightened competition and financial stability. We generally agree with the analysis and messages highlighted in this useful chapter. In this regard, France has taken a range of measures to ensure that risks are contained, and adequate instruments are in place in response to possible episodes of stress.

We generally share the useful messages linked with the buildup of debt in emerging and frontier markets, in the current easy external financing conditions. The rising role non-financial corporations as de facto financial intermediaries in emerging markets has been growing partly accounting for the rise of corporate debt in these countries, which requires close monitoring. On SOEs, staff's recommendations are appropriate, notably on enhancing their governance. We share staff's concern regarding rising external foreign currency financing of SOEs. We would be interested in staff's assessment of the drivers of the sizable decline of their profitability. An analysis of short-term risks linked to SOEs defaults on public debt would also have been warranted. More broadly, we share staff's assessment that with already high levels of debt (both public and private) in some countries, easy financing conditions may encourage excessive indebtedness and raises sustainability risks. We support staff's message that enhanced coordination between official creditors is necessary given new financing modalities. Continued staff work on collateralized debt will be useful going forward. Finally, we have some reservations on the interpretations of the results of the study by Kratz, Feng and Wright, which is based on a relatively limited sample of debt renegotiations.

Non-US banks' vulnerabilities arising from US dollar liquidity reflect the importance of sound domestic financial systems and strong regulatory frameworks but also advocate for an enhanced global financial safety net. We broadly share the main findings of this chapter. In this respect, it is worthwhile to underline that the predominant role of the US dollar in trade transactions, capital flows as well as foreign exchange and financial markets largely accounts for the importance of US dollar intermediation by global non-US banks. The increase in the dollar's international role since the GFC, when the relative economic weight of the US has decreased, should deserve attention and analysis. We appreciated the increased account of our past comments on the methodology (including intra-group transactions) and policy considerations acknowledging the dominance of the US dollar as a source of potential financial disruption and the consistency of a global response. In this regard, staff's analysis highlights the usefulness of bilateral swap agreement in providing dollars, though we note that they are currently limited to the main advanced economies.

The stronger consideration given to Environmental, Social and Governance (ESG) is very much welcome, as part of a broader engagement of the Fund on climate issues. In line with all the work already carried out by the Network to Green the Financial System, we fully share staff's diagnostic on

ESG factors' impact on firms' corporate performance and risk profile and on the stability of the financial system. The participation of the IMF to the NGFS as an observer is particularly welcome in this regard. Support from regulators and central banks to evaluate ESG risks and contribute to the building up of ESG-related markets is encouraged. However, we regret that staff did not call more explicitly for the development of international standards on ESG (and notably, extra-financial information), which is key to develop a deeper and stronger market.

Mr. De Lannoy, Mr. Jost, Mr. Voinea, Mr. Hanson and Mr. Manchev submitted the following statement:

Outlook

We share staff's assessment of the weakening in global economic activity. Trade tensions and a slowdown in global industrial production contribute to a slowdown in economic growth. Risks to the outlook are mostly policy based. This means that headwinds can be turned into tailwinds with the right policy actions: multilateral cooperation is needed to strengthen the rules-based multilateral trading system and reverse trade tensions; a no-deal Brexit should be averted; and strong domestic policies are needed to address idiosyncratic risks in distressed EMEs.

At the same time cyclical indicators remain strong. Unemployment is at historically low levels in advanced economies (the lowest level in the WEO database, which has data since 1980) and it is set to decrease further towards 4.8 percent in 2020. Output gaps in major advanced economies and the euro area are closed and are expected to remain in positive territory.

We stress the importance of structural reforms to strengthen potential growth and address future challenges such as demographic change, technological developments, cyber risks and climate change. The baseline cyclical outlook also provides scope to rebuild fiscal buffers and reduce vulnerabilities in the financial sector.

Policy Mix

Monetary policy needs to remain accommodative to guard against a deceleration in activity and a downshift in inflation expectations, and central bank independence needs to be preserved. However, disinflationary pressures seem mostly related to structural changes such as globalization, technological progress and demographic changes. More research is needed to better understand their contribution to inflation dynamics. Further monetary accommodation will likely not be effective in addressing these supply side drivers of disinflation. Monetary policy also cannot make up for an escalation of tariffs. At the same time, low for long interest rates contribute to the buildup of vulnerabilities and medium-term financial stability risks, which may negatively affect growth and inflation in the medium-term. It is therefore relevant for central banks to take the effects of accommodative policies on financial vulnerabilities into account. The Fund should step up its efforts to increase its understanding on how to incorporate financial stability considerations in monetary policy frameworks. Can staff confirm that this is part of the work on the Integrated Policy Framework?

Macro-prudential policy alone cannot correct for the unintended consequences of accommodative monetary policies. The GFSR shows consistently since at least 2016 that vulnerabilities continue to build up. With long term yields in several major advanced economies at ultra-low levels investors are increasing their portfolio risk profile, corporates are leveraging up and house prices keep increasing. The GFSR states that term premiums are below fundamentals, equity markets are overvalued, and corporate bond prices remain stretched. Macro-prudential policies can slow down the build-up of such vulnerabilities only in specific sectors and countries. Complete coverage would also seem to defeat the purpose of accommodative monetary policy. It would be like giving gas while applying the brakes at the same time. How does staff square its advice to rely on macroprudential tools with its observation that few tools are available in many jurisdictions?

Fiscal policy needs to strike a right balance between stabilization, sustainability and allocation. Automatic stabilizers should be the first line of defense. They ensure a timely and targeted response to economic shocks and have the potential to provide substantial stabilization. Public debt is near historic peaks and countries with high debt need to rebuild fiscal buffers to create space for the operation of automatic stabilizers. While cyclical indicators are strong, this is the right time to reduce debt levels. We caution against snowball-optimism: in many countries the windfall from low interest rates has already been used to shore up public spending, while declining nominal growth rates compress the interest rate-growth differential. The sign of the snowball effect may also reverse if monetary policy normalizes or if risk premia increase. In any case, contingent liabilities related to ageing call for prudent public finances. We see much scope to improve the composition of public expenditure towards growth-friendly public investment, such as investment in R&D, infrastructure, education and the climate transition.

Structural reforms carry a significant premium in the current environment. They can counteract the weakening of global activity by sustaining potential growth rates, improving inclusiveness and strengthening resilience. Importantly, structural reforms can reduce the burden on monetary policy. A decline in the natural rate has forced central banks to reduce policy rates. Structural reforms can unlock investment and increase potential output, which raises the natural interest rate. We very much appreciate the work in the analytical chapters, but the flagships are still struggling to communicate appropriate urgency to increase potential output and ensure labor markets, product markets and social security are prepared for challenges related to ageing and technological change.

The plucking theory?

The box on the plucking theory provides an interesting explanation to the "missing inflation puzzle": it suggests the output gap is more negative than estimated. As mentioned above, we think global disinflationary pressures are mostly related to structural changes. We note that the inflation rate has a bad track record as a signal for the output gap in the euro area, while other cyclical indicators currently suggest a closed output gap (Buti et al. 2019)[2]. We also note that staff tended to overestimate output gaps for Europe in real time between 1994-2017 (Kangur et al. 2019).[3] This suggests a tendency to look for cyclical explanations for structural weaknesses. Misdiagnosing a slowdown in potential output growth as weak demand may lead to misguided policy advice (see e.g. Bakker, 2019)[4]. We stress the importance of considering structural explanations for the current inflation outlook. Is staff also exploring structural explanations for the current environment of low interest rates and low inflation?

Fiscal Monitor

The Fiscal Monitor is a timely and valuable contribution. Staff's efforts to gather key climate change data, build a new methodological tool to project carbon emission and discuss policy solutions are impressive. We support carbon pricing – both taxation and emission trading schemes – as a key measure to address climate change in a cost-effective manner. We very much appreciate staff's analysis on distributional effects and the political

[2] Buti, M, N. Carnot, A. Hristov, K. Mc Morrow, W. Roeger, and V. Vandermeulen. "Potential output and EU fiscal surveillance". VoxEU Column.
[3] Kangur, A., K. Kirabaeva, J-M. Natal, and S. Voigts. "How Informative Are Real Time Output Gap Estimates in Europe?" IMF WP/19/200
[4] Bakker, B.B. "What happens if Central Banks misdiagnose a Slowdown in Potential Output Growth?" IMF WP/19/208.

economy of reforms. We support the calls in the paper to aim for an international carbon price floor and to investigate border carbon adjustments and other measures that could address first mover problems.

We continue to fully support staff's work on climate related challenges including when it comes to fiscal implications of adaptation and mitigation, risks to financial stability and protection of the most vulnerable parts of the membership.

We strongly encourage staff and management to further build on this work by regularly updating this projection exercise in flagship reports and using the analytical tools to systematically assess climate policies in Article IV reports. We support the integration of the assessment of climate change mitigation policies into the Fund's surveillance activity as part of the coming Comprehensive Surveillance Review and FSAP Review.

WEO Chapter 2: Subnational Regional Disparities

Globalization and trade liberalization are generally assumed to have contributed to a decrease in cross-country inequality, but to an increase in regional inequality within advanced economies. However, this chapter suggests that regional trade shocks didn't increase regional disparities, while technology shocks did. This is an important argument against protectionism, and we encourage staff to elaborate on it.

We agree with staff on the importance of flexible labor markets, open product markets, effective social safety nets and active labor market policy to address regional disparities. However, we would welcome in future WEO's a more elaborate empirical analysis or case studies of the effects of such policies on subnational regional inequality and adjustment. We would also be interested in a cross-country analysis by staff on fiscal decentralization, including its governance and effectiveness to counter regional disparities.

WEO Chapter 3: Structural Reforms in EMDEs

We welcome staff's analysis showing that structural reforms can provide a major boost to growth in EMDEs, by raising output by more than 7 percent over a 6-year period. We would be interested to know how reform complementarities and trade-offs would affect this figure.

The empirical analysis focuses on the positive effects of reforms on growth, employment and investment. We note that external finance reforms may negatively affect external sustainability if they are not-well sequenced. We therefore think it would be good to also consider the effect of these reforms on the current account balance. Staff's comments are welcome.

The structural model seems particularly well-suited to analyze the effects of specific reforms in EMDEs. The model accounts for relevant factors such as informality, governance strength, financial constraints, product market openness and labor market flexibility. We encourage staff to employ this model in bilateral surveillance to estimate the impact of structural reforms and to assess the complementarity and sequencing of specific reform packages.

GFSR Chapter 1: Global Financial Stability Overview – Lower for Longer

We welcome the improved format of the GFSR. The table of key vulnerabilities and policy recommendations in the executive summary provides an easy to communicate list of key messages. It would be helpful to also include a brief overview of the change in vulnerabilities relative to the previous GFSR. The shortened Chapter 1 provides a good overview of financial stability risks. We remain concerned that easy financial conditions contribute to a further buildup of vulnerabilities, while few tools are available in areas with high vulnerabilities.

We agree with staff that the global regulatory reform agenda should be fully implemented and that a roll-back of regulatory standards should be avoided.

GFSR Chapter 2: Global Corporate Sector Vulnerabilities

Staff's estimate of corporate debt-at-risk in major economies in case of a material slowdown serves as a clear wake-up call. We note that the recommended macroprudential policy tools to address risks from non-bank lending to the corporate sector are not yet sufficiently developed and should be developed further. But we also caution against overconfidence in macroprudential measures, as most aim to increase the resilience of banks and households but are ill-equipped to counterbalance the build-up of vulnerabilities.

The chapter doesn't discuss the risks related to Collateralized Loan Obligations (CLOs) investing in leveraged loans. The April 2019 GFSR suggests that risks related to CLOs are limited as they are mainly held by non-bank investors. However, the September BIS Quarterly Review argues that banks may be indirectly exposed to CLOs. How does Staff assess the risks related to CLOs? And does Staff have information on the indirect exposure of banks, pension funds and insurance companies to CLOs?

We also see real risks stemming from low interest rates in the corporate sector. Low rates may result in evergreening of existing loans to non-productive firms. This may come at the cost of lending to productive firms, having negative effects on productivity growth.

GFSR Chapter 3: Failing rates, rising risks

Institutional investors are particularly vulnerable for lower-for-longer yields. Staff rightly notes that lower-for-longer yields incite them to search for higher yields from new investment opportunities and to take on riskier positions. We support the proposed policy recommendations to better regulate fixed income investment funds, defined-benefit pension funds and life insurers and to mitigate the impact of greater risk-taking. An adequate valuation of liabilities is essential, as it will bring to light the effect of low interest rates on their balance sheets.

GFSR Chapter 4: Emerging and frontier markets

Easy financing conditions have encouraged the build-up of debt in emerging and frontier markets. In some countries, collateralized debt contributes to debt vulnerabilities and reduces policy space. We agree with staff on the need to strengthen public debt recording and build debt management capacity. Improving domestic revenue mobilization is important to reduce reliance on debt-financing, while strong public investment management frameworks are needed to ensure contracted debt yields a return.

GFSR Chapter 5: Bank's dollar funding – financial stability implications

Foreign currency mismatches represent a risk to financial stability, also for smaller banks and smaller economies. This not only applies to dollar funding, but also to euro funding for EU banks outside of the euro area. The analysis in this chapter could in the future be extended to their position, for example in a Regional Economic Outlook. The risk of currency mismatches could possibly be countered by introducing currency-specific Liquidity Coverage Ratios.

Chapter 6: The link between sustainable finance and financial stability

Financial institutions can play a crucial role in facilitating the transition to a more sustainable economy. We agree that the implementation of ESG principles can be supported through standardization of investment terminology, clear product definitions and disclosure requirements. We wonder whether rewards form complying with principles may need to be complemented with penalties for non-compliance. We stress the importance of including ESG risks in stress tests and in the supervisory framework and we encourage MCM to do further work on this.

Mr. Inderbinen, Mr. Trabinski and Mr. Heim submitted the following statement:

The global economy is at a delicate juncture. The outlook has deteriorated further amid ongoing trade and geopolitical tensions, lingering policy uncertainty and some adverse country-specific developments. In addition, policy missteps have been made, which have further contributed to the hampering of economic activity. Securing the objective of sustainable and inclusive growth requires a renewed commitment to pursuing sound domestic policies, implementing structural reforms, and addressing common challenges within a multilateral framework that is fit for purpose. Avoiding further policy missteps should remain a top priority.

Global outlook and risks

We broadly share staff's assessment of recent developments and the outlook for the global economy. We take note of yet another downward revision to global growth forecasts for this year and the next. Manufacturing activity and trade growth have been weakening on the back of trade tensions and policy uncertainty. Moreover, business confidence and investment have been waning.

Risks remain tilted to the downside. An escalation of trade and technology tensions would further dent business confidence, investment and growth. The current slowdown in manufacturing activity could spill over to the still resilient services sector, with negative effects on employment and household confidence. The distinct possibility of a no-deal Brexit casts a cloud over regional and potentially global growth prospects. The impact of an abrupt shift in financial market sentiment on output would be amplified by the elevated financial vulnerabilities that keep rising on the back of easy financial conditions. Geopolitical frictions and historically high debt levels could also weaken growth prospects. In addition, we note the recent spike in the oil price. If the increase is sustained, it could further weigh on the global economy at a critical moment. Could staff elaborate on the scenario of a sustained oil price rise?

Multilateral framework

We underline the importance of a multilateral framework that provides for an orderly and predictable process to resolve tensions and disagreements, thereby enhancing confidence and supporting growth and investment while strengthening macroeconomic and financial stability. If the current framework is not deemed effective, it should not be abolished but improved. Inward-looking policies and unilateral actions are no solution to address international challenges. In particular, tariffs and other trade restrictions are a losing proposition and not a way to tackle global imbalances. We need a level playing field governed by a set of rules that are commonly agreed on and adhered to.

Policies

The overarching policy objective should be to reduce risks and secure growth prospects. The main priorities remain broadly unchanged relative to six months ago. That said, there is a greater sense of urgency, given subdued growth prospects and increased risks.

Structural reforms

Structural reforms play a critical role in lifting growth prospects, enhancing resilience and making growth more inclusive. We welcome the analytical work in this regard in the World Economic Outlook. This work underscores the importance of domestic policies in facilitating adjustment to shocks and adaptation to structural change. On the latter, we underline the importance of policies aimed at ensuring broad access to high quality education, skills building and retraining, including through vocational education and training. We also support efforts to enhance governance and institutions, to remove key impediments to growth. We commend staff for their recent work on the political costs of reforms. A better understanding of political economy issues should help to enhance the traction and program design of the Fund's advice in this area.

We welcome the in-depth study on subnational regional disparities and adjustments in advanced economies. The study shows that policies that reduce distortions and encourage more flexible and open markets may prove successful in regional adjustment to adverse shocks and in dampening rises in unemployment. It further concludes that differences in terms of productivity stem mainly from disparities in productivity across sectors. We are of the view that the assumption on the nature of the link between the employment mix in lagging regions and their low aggregate productivity needs additional analysis.

Fiscal policy

We welcome the work on the role of fiscal policies in climate change mitigation and we agree on the critical importance of switching from fossil fuels to cleaner energy. The transformation should be growth- and job-friendly in order not to lose public support for policy action. Furthermore, the development and implementation of alternative technologies to phase out over-reliance on fossil fuels is crucial. To this end, we need to support innovation and new technologies that are both effective and affordable.

We see merit in a differentiated fiscal policy advice. At the current stage of the economic cycle, automatic stabilizers should be allowed to operate effectively, and we see no need at this point for discretionary fiscal activism. Policy space, which is limited in many countries, should be preserved for the case of a protracted downturn with widening output gaps. Moreover, we caution against overestimating fiscal space on the basis of the current low interest rate environment.

We underscore the critical role of strong fiscal frameworks in avoiding pro-cyclical policies and ensuring debt sustainability. It is regrettable that fiscal buffers have not been sufficiently rebuilt during the earlier upswing. Public debt vulnerabilities remain too high in many economies. Fiscal policy should be counter-cyclical over the whole economic cycle, not only during growth slowdowns. In this way, these frameworks also help to garner resources to finance public investment projects and meet social objectives. Also, fiscal policy should continue to focus on the quality of measures and on ensuring a growth-friendly budget composition.

We welcome staff's work on external borrowing by emerging and frontier markets and on potential risks from the mixed blessings of easy financing conditions and enhanced access to financing. We concur on the importance of sound debt management in tackling these risks and on the need of building capacity in this area. More generally, we reiterate our support for the "multipronged approach" to address emerging debt vulnerabilities and call for continued progress on all four pillars of this approach.

Monetary policy

The stance of monetary policy should continue to be data dependent and well communicated, in line with central bank mandates. Sound monetary policy frameworks, in particular central bank independence, play a crucial role in anchoring inflation expectations and strengthening macroeconomic stability. Against the background of persistent low inflation and entrenched lower inflation expectations, more research is needed to better understand inflation dynamics, in particular the contribution of structural changes.

Financial issues

Effective regulation and robust supervision remain essential to preserve financial stability. While central bank actions may have mitigated financial stability risks in the short term, these risks are mounting in the medium term, notably so in the nonfinancial corporate sector. Macroprudential tools are better suited to address financial vulnerabilities, as monetary policy is too blunt a tool for this purpose.

We welcome staff's timely contribution to the ongoing discussion on US dollar funding. We agree that continued monitoring of US dollar funding fragility is warranted in light of the possible financial stress and spillovers that could result from a sudden tightening of US dollar funding costs. We note that the chapter gives only a partial picture of US dollar funding as it focuses solely on banks. The role of nonbanks has been rising and deserves closer scrutiny in collaboration with other international institutions working on this issue.

Furthermore, we continue to stress the need to complete and fully implement the global financial reform agenda and to avoid a rollback of reforms.

Mr. Fanizza, Ms. Quaglierini, Mr. Spadafora, Ms. Cerami and Ms. Mateus submitted the following statement:

Overall assessment

We thank staff for a good set of reports. We share staff's description of the global outlook as precarious as well as the assessment of the current macro-financial conditions. Macroeconomic developments since last April point to a significantly larger-than-expected slowdown in economic activity across the globe. Rising trade and geopolitical tensions and increased uncertainty have weighed on trade, investment, and manufacturing activity. A car-production drop has further contributed to the weakening, particularly in some advanced countries. Moreover, the precarious outlook presents risks that are skewed to the downside. Under this scenario, we believe policies should respond immediately. We cannot afford waiting for a downturn to materialize.

WEO

Monetary policy easing has been timely taken. It has supported the global economy, in light of the persistently low – and below target – inflation in several countries. However, it has become clear that monetary policy faces increasing limitations in acting as the sole policy response. Besides, continued easing may contribute to building up vulnerabilities in financial systems. We agree macro-prudential policies can help strengthen financial systems and address vulnerabilities that have emerged because of increasing holdings of riskier assets and rising corporate debt burdens.

We would have appreciated a stronger call for the active use of fiscal policies in countries where fiscal space is available, by raising public investments to boost long-term prospects, considering record-low interest rates. High-debt countries should continue seeking the right balance between ensuring debt sustainability and supporting economic activity, with a special attention to investment and social inclusion. We believe these countries should avoid taking a pro-cyclical fiscal stance because: a) it would further hurt economic activity; and b) it would complicate the implementation of much-needed structural reforms to raise productivity and potential output.

A rebalancing of the policy mix is urgently needed. It would make easier for monetary policy to achieve its inflation target, avoiding that further easing becomes a source of financial vulnerabilities. We see value in an appropriately coordinated fiscal response, as staff recommends, considering that : a) the uncertain pick up in global activity in 2020 is expected to result from less adverse conditions in some stressed economies; and b) the possibility that the services sector and consumption growth, which have so far held up well, could be affected by the weakness of the manufacturing sector going ahead. In fact, because of the "grim and precarious" outlook, we believe that policy makers should act now to avoid the materialization of a downturn.

To address the root of trade tensions, consistent multilateral action is needed, most notably by lowering global imbalances. Trade tensions have materialized partly because of insufficient progress in addressing global imbalances. Thus, decisive action is needed to symmetrically lower these imbalances. To this end, excess surplus countries should contribute to the adjustment by supporting domestic demand, thereby also boosting global growth and lessening the adjustment burden on deficit countries.

On output gap estimates, we warmly welcome Box 1.4 on the "Plucking Theory of the Business Cycle", which provides further evidence that questions using Fund's output-gap estimates for policy advice.

Like staff, we see a strong case for renewed emphasis on country-tailored structural policies to address longer-term challenges such as those posed by slowing productivity growth, aging population, and insufficient within- and across-countries convergence.

GFSR

We welcome the new GFSR structure that makes the report more readable and focused on the main messages. On content, we agree that risks to financial stability are on the rise and that several sectors and markets exhibit heightened vulnerabilities and price misalignments. This calls for decisive policy action, implementing the appropriate regulations in place, avoiding the roll back of post-GFC reforms, while monitoring new risks. For this reason, we support Chapter 1 message that policymakers should be vigilant about risks and ready to use the macro-prudential tools at their disposal, as well as to develop new tools that are still missing in their toolkit. Given the heightened risk level, we consider that desirable policy actions, beyond transparency and oversight, should also be highlighted in the executive summary.

Fiscal Monitor

We appreciate the focus in the flagships on the enormous challenges raised by climate change and the call for urgent collective actions. However, we are under the impression that complying with the pledges made by countries under the Paris Accord would imply larger investment gaps than estimated by staff. Overall, we concur with the Fiscal Monitor that a carbon tax can represent an efficient way to reduce carbon emissions globally. However, the tax may be regressive and disproportionally hurt vulnerable social groups. We therefore appreciate the analysis of the possible uses of the fiscal receipts aimed at reconciling both economic efficiency and distributional effects. Particularly, we welcome the elaboration on mixed measures, e.g. monetary transfer payments coupled with tax cuts on labor and higher public investments, as a promising way forward. It is worth noting that technological innovation remains key to promoting the transition from fossil fuels to clean and renewable energy, and that R&D and fiscal incentives targeted on renewable energy are paramount. Looking ahead, we strongly encourage staff and management to further build on this work by regularly updating this projection exercise in flagship reports.

ANNEX

Specific comments on analytical chapters

We add the following comments for emphasis and clarification:

WEO Chapter 3. Based on three complementary approaches and a newly constructed reform data set, the chapter aptly documents the benefits from simultaneous structural reforms, which in staff's estimates could double the speed of per-capita income convergence of the average Emerging Market and Developing Economy to the living standards of advanced economies. We also welcome the chapter's focus on identifying the drivers of the differentiated effect of reforms across countries and over time. Other than confirming well-established findings highlighted in the relevant literature, staff's analysis provides an array of novel results. In our view, three of them stand out: 1) strong governance can directly and indirectly support economic growth and magnify the impact of reforms in trade, financial, labor and product markets; 2) the state of the business cycle affects the impact of reforms; 3) redistribution policies are needed to play a complementary role in mitigating the impact of reforms on inequality and maximizing the boost to economic growth. Staff's analysis also confirms the view that countercyclical support is needed to offset possible short-term macroeconomic costs of reforms undertaken in bad times. We highlight that incorporation of environmental, social and governance (ESG)-related consideration into Fund surveillance needs to obey to the principle of macro criticality.

GFSR, Chapter 1. In paragraph 33, the reference to concerns about Italy's fiscal developments among the potential triggers of a sharp tightening in financial conditions is overblown as sovereign spreads have reached low levels. Moreover, for the sake of consistency, the language in the GFSR should be aligned with the one in the WEO. More generally, expectations that interest rates will remain very low for longer than previously anticipated is likely to reinforce investors' search-for-yield and attendant risks for financial stability. We agree with staff that compressed term premia, stretched asset valuations and low market volatility may be sources of instability in case of a reassessment of markets expectations about the monetary policy outlook in key advanced economies. We particularly welcome staff's focus on rising risks and vulnerabilities for nonfinancial corporates and institutional investors, which are elevated by historical standards, and broadly support staff's policy recommendations. Staff's finding that corporate earnings forecasts have been revised down since April is a further confirmation that the detrimental impact of trade tensions has already materialized. Staff's simulations show that in an adverse scenario, half as severe as the global financial crisis, debt-at-risk issued by vulnerable companies would approach or exceed crisis levels in terms of GDP. Concerns relate not only to increases in the level of corporate debt but also to its use, notably in the U.S., for financial risk-taking rather than for capital expenditures. Further risks arise from the fact that — prompted in part by guaranteed nominal returns — institutional investors in the U.S. and the euro area are investing in riskier and less liquid assets. Policymakers need to avoid that increased corporate leverage becomes an amplifier of shocks and a channel of negative spillovers to the banking sector. We agree that any rollback of regulatory standards should be avoided. We also see merit in staff's recommendations on strengthening regulation and supervision — as warranted — and improving disclosure in the nonbank financial sector, in light of its increased role in risky lending. We encourage staff to further explore the links between tighter macroprudential policies and higher lending by nonbank financial firms.

GFSR Chapter 5. The chapter offers a valuable analytical contribution to further assess risks and vulnerabilities posed by US dollar funding to non-US global banks. The latter face a widened currency mismatch in their balance sheets: the increase in their US dollar-denominated assets confronts a tighter supply of dollar funding. The resulting increased reliance on FX swap markets – i.e. synthetic dollar funding – at higher costs exposes non-US global banks to risks of stress in US dollar funding markets; equally important, it creates a link between financial conditions in the US and these banks' home economies, which in turn can be a source of negative spillovers to loan-recipient emerging markets (via banks cutting back on cross-border lending). We thus support staff's recommendations. The chapter could have expanded more on whether other factors other than higher returns and the interest rate differential may account for the expansion of the US dollar funding gap. Staff's comments are welcome. Staff's newly constructed measures of US dollar funding fragility can be useful in monitoring the risks in the face of the recent increase in the cross-currency funding gap beyond the pre-crisis peak of mid-2008. The chapter also usefully documents the links between the cross-currency funding ratio and the basis, as well as the factors – including regulatory reforms – underlying the strengthening of this link. Staff's analysis emphasizes that a shock to the cost of US dollar funding – approximated by changes to the US dollar cross-currency basis – is statistically associated with an increase in the probability of home economies' banking sector defaults and spills over recipient economies. Staff's findings can provide a financial stability-based insurance rationale for central banks in emerging markets to accumulate international reserve holdings.

GFSR Chapter 6: The chapter provides a valuable primer of the relationships between sustainable finance and financial stability. We share the view that key ESG issues can give rise to an array of risks – including material credit risks – and thus need to be carefully monitored and incorporated in risk management policies. Given the longer-term nature of the positive externalities from ESG-related factors, one of the key questions if whether – and to what extent – the integration of these factors into firms' business model should be prompted by regulators or by private stakeholders (investors, rating agencies, score providers). In this regard, the move from negative to positive screening strategies of sustainable investing is a major development whose effects have not been fully appreciated yet. Risks from climate change set themselves apart and we share the chapter's emphasis on their nonlinear and multi-faceted nature. The recommendations issued in April by the Network for Greening the Financial System (NGFS) represent a major step forward to translate into concrete actions the commitments to act and address financial risks posed by climate change. We tend to agree with staff that policy action is needed to incentivize firms towards better incorporating ESG principles in their business models. For example, given the current fragmentation in ESG-related disclosure, there is a clear case for common international standards on disclosure of financial firms' exposures to climate-related risks, in line with the recommendations of the Task Force on Climate-related Financial Disclosures.

Mr. Jin, Mr. Sun, Ms. Liu, Ms. Zhao and Ms. Lok submitted the following statement:

We thank staff for the comprehensive set of flagship reports.
The global economy is at a delicate juncture. Growth has continued to slow down amid rising trade and geopolitical tensions and increased policy uncertainty. Facing a precarious outlook, it is important to avoid policy missteps and tackle challenges in a cooperative manner within a multilateral and rules-based system.

World Economic Outlook (WEO)

On global economic developments: The ongoing trade tensions have taken a toll on global trade, investment, supply chains, and business confidence, weighing on the global economy. Economic activity and outlook have weakened for advanced economies (AEs) as well as emerging markets and developing economies (EMDEs), resulting in downward revisions, for many, to the October WEO growth forecasts. The 2019 and 2020 growth forecasts for the United States, on the other hand, have been revised upwards from the April WEO. We note staff's assessment that this outturn reflects the recently adopted two-year budget deal and the Federal Reserve's policy rate cuts, which helped offset the negative effects driven by factors including trade-related uncertainties. Facing external pressures including a global slowdown and fading effects of the 2017 Tax Cuts and Jobs Act, to what extent can the recent stimulus sustain economic momentum in the US?

Inflation remains muted, with core inflation sliding further below target across AEs and below historical averages in many EMDEs. Despite higher import tariffs, cost pressures remain largely subdued in some countries. Besides compression of firms' profit margins, are there other reasons behind the absence of pass through to inflation? Staff also pointed out that the labor share of income has been on a gentle upward trend since around 2014 in Japan, the United States, and the United Kingdom. What have been the drivers behind the upward trend in labor share of income since 2014? We believe this is an area that warrants further analysis by staff.

On trade: Unilateral and protective practices are threatening multilateralism and the free trade system, and it is the biggest challenge and risk facing the global economy. We welcome staff's analyses in Scenario Boxes 1 and 2, which highlight the negative impact of trade tensions and a retreat from openness. The Fund should continue to send a strong message on the potential damages of unilateral and protective actions. At the same time, we support staff's call for strengthening multilateral cooperation to resolve trade disagreements and roll back t recently imposed distortionary barriers. We should resolve trade tensions constructively and cooperatively to put the global economy back on track. To do so, it is necessary to reform and strengthen the World Trade Organization (WTO) and promote further liberalization and facilitation of trade and investment. We hope to continue to work with the Fund, as well as other international institutions and partners, to upgrade the WTO and safeguard the rules-based multilateral trade system.

On regional disparities: We thank staff for the timely and insightful analysis on regional disparities in advanced economies in the Analytical Chapter 2 of the WEO. Given the current context of growing social and political tensions in some countries, this chapter's main findings are highly relevant. Staff's analysis shows that lagging regions of a country are more likely to have lower labor productivity across sectors and to be more concentrated in agriculture and industry than in services, while increases in import competition in external markets, associated with the rise of China's productivity, do not have marked effects on regional unemployment. We encourage staff to further analyze the effects of the rise of China's productivity, including potential benefits associated with the lowering of price levels.

On structural reforms: We welcome staff's study on the role for structural reforms in reigniting growth in emerging market and low-income economies in the Analytical Chapter 3 of the WEO. The chapter highlights the importance of reform packaging, sequencing, and prioritizing. Getting this right would require a tailored strategy that takes full account of context and country-specific circumstances. We encourage staff to continue to work in this area to offer member countries useful and practical policy advice. While the focus of this chapter is on emerging market and low-income economies, we also see merit in conducting more analysis on how structural reforms can help boost productivity and reduce domestic imbalances among advanced economies.

On the Chinese Economy: The Chinese economy remains stable and resilient, registering 6.3 percent growth in the first half of this year, while key economic indicators including consumer prices and employment in the first eight months have stayed within a reasonable range. Consumption has been the main driver of the Chinese economy in the first half of this year, contributing 60 percent to the country's economic growth, 40 percentage points higher than investment. Meanwhile, exports grew by 6.1 percent, while imports went up by 0.8 percent in the first eight months. Foreign direct investment flowing into China increased 7.3 percent in the first seven months of the year.

Facing downward pressures arising from a more uncertain external environment, China has been deploying policy stimulus to support its economy. On the fiscal side, China's unprecedented and comprehensive tax and fee cut has saved enterprises and individuals nearly 1.35 trillion yuan (about 189 billion U.S. dollars) in the first seven months of this year, benefitting almost all taxpayers. In particular, manufacturing and private sectors have been the biggest beneficiaries of the tax and fee reductions. These measures have helped stimulate market vitality, enhance market confidence, and boost economic growth momentum. On the monetary side, policy continued to be prudent and data-dependent, reflecting the authorities' confidence in the economy. A combination of monetary policy instruments has been used to keep liquidity at an appropriate level.

Meanwhile, the authorities will continue to take measures as needed to support consumption to allow it to play a more prominent role in economic growth. This is in line with staff's call for shifting underlying growth sources toward private consumption. That said, while staff has suggested moving away from credit-fueled investment, we believe it is also important to recognize the role that equity-based investment can play in supporting growth.

Overall, given China's solid fundamentals and great potential, we are confident that the economy has the capacity and will to overcome negative impacts of external shocks and will adapt to sustainable and quality growth.

Global Financial Stability Report (GFSR)

On further monetary easing: Over the past few months, financial markets have continued to be influenced by turbulent trade relations and growing concerns over the economic outlook. The more dovish monetary stance of central banks around the world has eased financial conditions and lent some support to the global economy, but this does not come without costs. As staff has rightly pointed out, a prolonged period of accommodative financial conditions creates an environment conducive to a buildup of vulnerabilities. We therefore stress the need for economies to be mindful of a potential unintended adverse impact of further monetary accommodation on financial stability and take the necessary actions to prevent the accumulation of vulnerabilities. While staff have emphasized the role of macroprudential policies, we believe it is also important to uphold prudent microprudential supervisory and regulatory frameworks and avoid backtracking on the implementation of internationally agreed financial regulatory reforms. Going forward, we would also encourage staff to pay additional attention to the effects of monetary policy actions on exchange rates and prevent competitive monetary loosening.

On the Chinese financial system: China continues to attach significant importance to safeguarding financial stability. We welcome staff's continued attention to developments in our financial sector and value their policy advice. The recent bank interventions in China reflect the continuation of the authorities' efforts to clean up, consolidate, and strengthen some of the small- and medium-sized banks. The authorities' actions have been taken in a tailored and problem-oriented manner to address each bank's specific challenges, contain risks, and protect the rights and interests of average savers and investors. Specifically, actions taken on Baoshang Bank targeted solvency concerns, whereas the actions for Bank of Jinzhou and Hengfeng Bank sought to address liquidity concerns. China will continue to adopt both a market-based and a legal-based approach to resolve remaining risks in the banking sector, taking into account market- and bank-specific circumstances.

Fiscal Monitor (FM)

Climate change is an important threat to our planet and tackling its associated challenges requires a global effort. We welcome the discussion of this issue in the FM, which has made some valuable contributions to international efforts on this important subject. In our view, the ultimate goal is to ensure each country reduces its own emissions as required and promised. We encourage the Fund and other relevant international institutions to continue to work with countries to develop the most suitable solutions to climate change challenges, recognizing that there is no one-size-fits all approach. We should avoid placing the cart before the horse, and risk being overly fixated on a specific mitigation measure and losing sight of the ultimate goal. Meanwhile, when analyzing the distributive effects of mitigation policies on different income groups, we should consider not only demand-side factors, but also how and which potential policy responses might help alleviate the adverse effects on certain groups. In the case of carbon taxes, we welcome the FM's discussion on the different options for using the revenues generated to alleviate the adverse distributional impact of the tax and look forward to further work by staff in this area.

Mr. Kaya, Mr. Benk, Mr. Just, Mr. Marek, Mr. Bayar and Mr. Mehmedi submitted the following statement:

We thank staff for the comprehensive set of reports as well as the richness of thematic analyses on very pertinent topics. We broadly concur with staff's assessment about the global economic outlook, which rests on the lowest annual growth forecast since the global financial crisis. The downside risks to this outlook are substantial, emanating particularly from the lingering trade and geopolitical tensions, as well as the persistent deflationary pressures symptomatic of an underlying weakness in economic activity. We consider the overall policy recommendations to strike a delicate balance between promoting growth and enhancing resilience, as well as between the role of national policies and international coordination. Above all this will require a clear and credible commitment to return to a rules-based global trade system without which global policy uncertainty will continue to weigh on the growth outlook.

World Economic Outlook

We agree that there is a broad-based slowdown in economic activity both among advanced and emerging market economies. The WEO appropriately puts a strong emphasis on trade tensions and related policy uncertainties as these have already been weighing on business confidence and putting global growth at risk. The concomitant slowdown in global trade and investments is particularly worrisome as it may lead to a lasting slowdown in potential growth globally. Similarly, the near-global weakness in industrial production is particularly worrisome as it could undermine the relative resilience of the service sector which is critical to employment generation. The recent move back to more accommodative monetary policies has eased financial conditions, particularly in advanced economies, while offsetting the negative impact of elevated market volatility in emerging market and developing economies (EMDCs). At the same time, their marginal benefits decrease while financial stability risks increase. We therefore agree that regulators need to calibrate their macroprudential toolkit to address any emergent financial vulnerabilities. We share staff's projections that global growth will gradually recover starting from next year, reflecting the recent more accommodative policy measures, but critically hinging on an end to the trade war as well as the stabilization of conditions, particularly across stressed EMDCs. Nonetheless, as growth in major economies - including the US, China, Japan, and Europe – is projected to lose steam or remain sluggish over the forecast horizon, the underlying growth drivers in emerging markets also appear to be uncertain.

The outlook for advanced economies has broadly remained the same, projecting a broad-based softening in growth this year and next. The US economy maintained its strength in the first half of the year - possibly above its potential – reflecting buoyant employment and private consumption. We agree that the renewed monetary easing cycle will buttress economic activity in the US. However, we see a risk that growth could slow down more rapidly in 2020 amid elevated policy uncertainty and a weaker investment outlook. If that risk were to materialize, would staff see a possibility that the phasing-out of the 2017 Tax Cuts and Jobs Act be postponed? Nonetheless, we share staff's view that a credible fiscal consolidation plan – based mainly on revenue measures – is warranted to reverse the upward trajectory of public debt and underpin confidence. We underscore the importance of maintaining the current risk-based approach to financial regulation, supervision, and resolution and strengthening it in the case of nonbank financial institutions.

We broadly agree with staff's assessment about the euro area economic outlook. Staff forecasts a modest pickup in the economic activity driven by a recovery in external trade partners (including Turkey) and the fading of the temporary drags on growth. Nevertheless, the growth projections for the euro area warrant close scrutiny, as the region is very susceptible to an intensification of trade tensions as well as policy uncertainty. On that note, a no-deal Brexit remains a key risk, posing challenges beyond the prospects of the UK economy. We believe that given the slowdown in growth, coupled with the negative risks to the outlook, a timely, differentiated and well-calibrated policy response with an appropriate policy mix that avoids pro-cyclicality should be considered. While the accommodative monetary policy stance in the euro area remains appropriate, the equilibrium interest could be lower than currently assessed. Monetary policy space could be more limited, increasing the necessity for fiscal policy to play its part.

We note that the EMDCs continue to be the main engine of global growth, albeit with significant heterogeneity across countries. We agree that growth in the EMDCs – as a group - has likely bottomed out in 2019 and will accelerate in 2020. We broadly agree with the policy advice, which is appropriately calibrated to individual circumstances, and aims to support growth while ensuring fiscal, monetary, financial, and external sustainability. We appreciate the thematic analysis in Chapter 3 of the WEO, on the structural policy and reform patterns in the EMDCs and see a strong case for a renewed reform push following a period of relative lull in advancing the structural reform agenda.

We take note of the slowdown in China, reflecting both cyclical and structural factors, against a challenging external backdrop epitomized by elevated trade conflicts. We share staff's view that a well-calibrated policy mix that would avoid an excessive slowdown, while continuing to enhance the regulatory framework to address complex financial vulnerabilities is warranted. In Turkey, we take positive note of the substantive upgrades to staff's forecasts which reflect the strong recovery in the economy, sharp deceleration in inflation, and a sizable adjustment in the external account since the beginning of the year – on account of the authorities' supportive policies as well as a relatively more favorable external environment. The authorities will continue to take steps as outlined in their New Economic Plan to entrench the rebalancing process, as well as to reinvigorate growth toward its potential.

We reiterate our concern about the bleak prospects of income convergence for a sizable group of EMDCs, particularly in the Sub-Saharan Africa and broader MENA regions. This implies that for a population of about 1 billion, the income levels are expected to fall further behind those of advanced economies. We continue to support the Fund's program, surveillance, and capacity development engagement with these economies in support of their macroeconomic stabilization efforts as well as broader institutional improvement.

Global Financial Stability Report

We commend staff for the clear message and broadly concur with the assessment of the financial stability risks. In particular, we appreciate the special chapter on sustainable finance which deserves further research. The prolonged period of low interest rates in many advanced economies, notably in the US and the euro area, has enabled easier financing conditions. This could feed into vulnerabilities in the financial as well as the corporate sector, including through the potential build-up of sovereign debt, and institutional investors' search-for-yield portfolio management strategies, commitments related to guaranteed-income instruments, the mispricing of risk and misallocation of capital.

In addition to increasing leverage across most financial markets, an accommodative monetary policy stance also contributed to underpricing of risk in some asset classes, especially in the sovereign debt market. We note that financial easing can help create additional fiscal space for countries in need of public investment and demand-side stimuli. However, we highlight that quantitative easing contributed to significant declines in sovereign bond yields even for countries with high public debt levels. For countries with generally low risk premiums, bond yields declined even deeper into negative territory, as pointed out in the World Economic Outlook. Sudden repricing of risks could increase public sector vulnerabilities and amplify the sovereign-bank nexus. Caution is therefore warranted about potential adverse spill-overs to banks and persisting structural weakness in the banking sector of many advanced economies need to be addressed.

We concur that increasing leverage and low corporate sector credit quality can potentially put a strain on the financial sector through banks' as well as non-banks' exposure to corporate debt. We highlight that the corporate sector is outside the scope of financial regulation and therefore is not subject to a supervisory response. Extending the regulatory perimeter to non-financial corporations would raise issues related to the mandate of supervisory authorities, allocation of new competences and responsibilities and sufficiency of their current capacities. Within the regulatory perimeter, prudential regulation has been developed in particular for the banking sector, where the toolkit includes e.g. enhanced requirements on capital buffers and limits on household credit growth. We emphasize that developing new macroprudential tools for non-banks would have to be carefully assessed against the risks posed to the financial sector. These tools would be less relevant in countries, whose financial sector is dominantly bank-based.

Institutional investors such as pension funds and insurance have been increasingly investing in more risky assets to accommodate their guaranteed income products and face duration mismatches of their balance sheets. We concur that such conditions make the industry increasingly vulnerable to shocks in case of sudden investor redemptions. The ability of defined-benefit pension funds to meet their liabilities is pivotal. In addition, we highlight that defined-contribution pension funds' performance and ability to withstand shocks is also critical, given their complementary role in the retirement pension framework in many economies. We note that investment funds have been subject to similar risks, particularly facing a weak ability to meet abrupt investor redemptions with available liquid assets.

We welcome the analytical chapter on financial stability implications of banks' US dollar funding. In particular we note that an increase in US dollar funding costs can have adverse implications for emerging markets relying on US dollar funding, given their limited ability to replace dollar-denominated debt with other currencies. Non-US banks which play an intermediary role in channeling US dollar credit to emerging markets need to reinforce their resilience and address the underlying imbalances between their on-balance-sheet US dollar assets and liabilities. We highlight that while increased profitability can enhance banks' liquidity and capital buffers, a prudent approach to banking regulation should prevail.

Sustainable finance instruments are also a segment where risks need to be assessed prudently and respective regulation should be risk-based. We concur that regulation should clarify rules for investing in sustainable finance instruments and address information asymmetries to enable investors make qualified decisions and prevent greenwashing. Including the climate risk factor in stress tests might also be relevant, as climate change can potentially be macro-critical. At the same time, however, green investments and standard investment products regulation should be kept on equal footing to avoid market distortions. We support staff in advancing their analysis of this topic further, as markets already tend to incorporate climate risks in their decision-making in countries where such exposure is elevated.

Fiscal Monitor

We appreciate the focus of the Fiscal Monitor (FM) on how to mitigate climate change, including through various fiscal mitigation strategies, and how to make mitigation policies acceptable to domestic constituents.

Such analysis should increasingly feature in bilateral surveillance depending on the “macro-criticality” criterion while taking into consideration countries’ specific conditions.

We broadly concur that curbing greenhouse gas emissions (GGEs) and containing the associated consequences of rising temperatures and devastating climate events are urgent global imperatives and to this end, fiscal policy should play a key role in mitigating climate change. In this context, we agree that carbon taxes could be an efficient tool to reduce GGEs as they are a practical extension of excise taxes, are easy to implement, and through its incentive effects, will help mobilize private financing for mitigation activities and spur the innovation needed to address climate challenges. Alternative mitigation policies, including emission trading systems, feebates, and non-fiscal tools such as regulations should also be employed. Ultimately, the optimal mix of measures and strategies for reducing GGEs will need to reflect countries’ differing initial positions, the feasibility of price and non-price measures, and political economy constraints. In our view, the urgency of the climate crisis calls for the deployment of all appropriate and feasible tax and expenditure measures which ensure that countries not only fulfill their nationally-determined contributions under the UNFCCC but also shift energy supply investments towards low-carbon sources. We would appreciate staff’s comments whether work on assessing the carbon content of imports will be planned.

Staff’s quantitative analysis on how a carbon tax could help achieve mitigation targets through three scenarios with rates of $25, $50, and $75 per metric ton, is helpful but the rates seem to be on the high side compared to the illustrative scenarios being considered by the World Bank on its provision of technical assistance as part of the Partnership for Market Readiness framework. In this context, we would appreciate staff’s comment on the illustrative tax rates and whether this work is being coordinated with the World Bank. The three scenarios with different tax rates underscore the large cross-country differences in carbon prices consistent with individual country pledges. To this end, we note the benefits of establishing an international carbon price floor but consider that the success in multilateral fora on establishing carbon price floor arrangements for high emitting countries and their effectiveness will depend on whether the large-emitting countries are willing to join this arrangement and whether a broad-based agreement on how to track effective carbon prices is reached. We note that staff's analysis could have benefited from a more thorough discussion on the spillover effects of carbon taxation, including the possible shift in investment by firms from a country with high carbon taxation to the country with lower carbon taxation as well as the impact of possible economic restructuring on the growth outlook.

Raising political support for mitigation measures will require the implementation of a comprehensive, gradually phased, and well communicated strategy which addresses the political economy challenges. An effective coordination with the relevant international organizations, particularly the UNFCCC, remains crucial, inter alia to strike consistency of the proposed policies with the commitments and responsibilities of all parties. The strategy should also clearly specify the deployment of the range of mitigation policies, and the use of carbon tax revenues, including the planned measures to assist vulnerable groups and address distributional concerns, and policies aimed at improving economic efficiency, supporting energy-intensive industries' transition to the "new normal," and implementation of measures in boosting clean technology investment.

Mr. Villar, Mr. Guerra, Mr. Moreno, Mr. Rojas Ramirez, Mr. Tabora Munoz, Ms. Arevalo Arroyo, Mr. Cartagena Guardado, Mr. Montero and Ms. Mulas submitted the following statement:

We share staff's more somber tone on the world economy. Trade, geopolitical and financial risks have either materialized or increased and are having a direct impact on the manufacturing sector with increasing potential spillovers into the services sector. The Fund should be a strong voice for raising the alarm and calling for a toning-down of the escalating economic policy tensions, which are at the center of the slowdown and the downside risks. In this respect, the call for multilateralism at the beginning of policy actions is well-placed. In parallel, macroeconomic policy must stretch the limits of its remaining space. Advanced economies' central banks have already taken further easing measures, but the WEO is rightly calling for the need for fiscal policy to step-in in support of aggregate demand, particularly in countries with fiscal space and, even more so, in the current context of very low interest rates.

We have two main caveats to the staff's assessment: (i) First, the recovery in 2020 basically rests on the pick-up of emerging countries, for which the scenario is highly uncertain; could staff comment on the specific risks that emerging economies face in the short and medium term? Do staff's growth projections in the medium term for advanced economies take into consideration the higher financial vulnerabilities given the current low-rate environment (as presented in the GFSR)? (ii) Notwithstanding the necessary focus of the WEO on the materializing trade and geopolitical risks, we missed more emphasis on the challenge of inclusion as well as inequality, which are strongly linked to democratic shifts and the current policy uncertainty. We would welcome staff's comments and further development of these topics in future WEOs.

We welcome the analysis on regional disparities in AEs, which provides interesting analytical evidence and policy insights in terms of easing regional adjustment to economic shocks. For future WEOs, we look forward to the same type of analysis in emerging market and low-income economies, where reasons for regional disparities and policy implications may be quite different. The chapter mentions that emerging markets have shown some degree of subnational regional convergence over time during the last decade, but their internal disparities are still much higher than those in advanced economies. For these reasons, we call for IMF's increased support for these countries that are "lost in the middle," and are not considered low income but have an important part of the poor population.

We have three more specific comments: First, staff assesses that household-level inequality in disposable income at the country level is barely affected by the regional component. However, this analysis is based on household income after tax and transfers, i.e. after the impact from public policies addressed to reduce inequality in advanced economies. Using gross income instead (before taxes and transfers) might provide additional insight. This result would probably be very different in emerging market and low-income economies, where in some cases fiscal policy has shown less impact on income distribution. Secondly, we found somehow striking that—in contrast with technology shocks—shocks from import competition from China do not have a marked average permanent effect on regional unemployment. This result may be hiding substantial heterogeneity on regional-level effects. For instance, it would be compatible with some regions experiencing a very negative effect and others a very positive one, but on average the overall effect would be zero. Third, we share staff's tentative policy recommendations to facilitate regional adjustment to adverse local labor demand shocks, including greater fiscal decentralization. We also highlight the idea that national structural policies that encourage more open and flexible markets are associated with improved regional adjustment to shocks. We would appreciate staff's comments on whether this may be consistent with benefits from some decentralization of labor market policies.

We broadly agree that political economy concerns are key when designing the structural reform agenda. We agree on the importance of tailoring reforms to country circumstances. For labor and financial reforms, staff suggests that their impact is greater if they are adopted in good times, when the political costs are lower. However, the political economy of the reforms creates a bias for them to be done when they are inevitable, which in many cases coincides with the presence of crises. Therefore, the Fund should encourage to frontload reforms in good times by offering technical assistance and precautionary financial support for economies and not only financial support during crisis periods. Also, we concur with staff that reforms are more successful when governance is strong. Regarding informality, we highlight staff's finding that reform gains are larger where informality is higher because reforms help reduce it. We encourage further research on which are the reforms that help reduce informality in low-income and emerging economies. We also concur on the importance of complementary reforms to mitigate reforms' adverse effects on income distribution. We congratulate staff for the building of an extraordinary data set to analyze the role of structural reforms for growth in emerging market and low-income economies, as it is not only key for the chapter but also for future research.

We thank staff for the excellent analysis presented in the GFSR. From the report, it is clear that we should not be complacent. In the context of an increased focus on policy makers for supporting growth, the buildup of financial vulnerabilities continues. The normalization cycle of monetary policy has been stopped and the baseline scenario is for a continued regime of very low or negative interest rates in major advanced economies in the foreseeable future. Search for yields will continue amid a more uncertain global context. The GFSR analysis highlights that cross-border linkages have increased among financial institutions in a context of higher corporate vulnerabilities. Emerging markets, although benefiting from more liquid global conditions, will be subject to increased risks as the buildup of financial vulnerabilities continues. The financial stability objective is becoming a more complex endeavor as the monetary policy accommodation continues and trade and geopolitical tensions persist. To reduce the risk that the additional easing may have on financial vulnerabilities, countries should tighten macro prudential policies taking into consideration their circumstances. If the necessary macro tools are lacking, then authorities should develop them. The best time to take actions to reduce financial stability risks is when vulnerabilities are still relatively low and financial conditions are accommodative. Addressing financial vulnerabilities will be reflected in a more resilient global growth. Last, but not least, authorities should communicate clearly their policy decisions in a timely manner to reduce policy uncertainty.

We appreciate the analysis in Chapter 2 on corporate vulnerabilities in advanced economies, particularly the use of firm-level information, as accounting for heterogeneity is crucial in this type of exercises. In using this more granular information, it is important that the sample of firms be reasonably representative of the population of firms in the economy to ensure that the analysis is not biased by over-(under-)representation of certain types of firms, e.g. by size or sector of activity. In this respect, we have some reservations concerning the sample composition. For instance, the sample of US firms consists of roughly 5,000 firms of which about 58 percent are large and we wonder whether this is representative enough. This calls for a very careful interpretation of results in the second part of the chapter. This notwithstanding, we share the appraisal that corporate vulnerabilities should be addressed urgently, particularly with a more proactive use of macroprudential tools. We see merit in exploring more targeted sectoral measures, as well as the possibility of developing prudential tools for highly leveraged firms.

Institutional investors decisions, under current conditions, may generate vulnerabilities and jeopardize financial markets stability. The current market situation, characterized by persistently low yields and declining interest rates, may encourage institutional investors to look for higher returns in illiquid and riskier positions. Should these conditions persist, we concur that we risk increased market vulnerabilities, a growing financial market instability and further market procyclicality along shocks and risk transmissions. We welcome those policy actions proposed in the report for halting these vulnerabilities aiming at designing and implementing appropriate incentives, adopting measures for solvency preserving, as well as enhancing liquidity standards and disclosure procedures.

Countries should strengthen fundamentals to manage the unintended consequences of continued easy financial conditions as well as to avoid buildup of debt. We believe that as downside risks increase, it is fundamental to analyze growing debt build-up and debt vulnerabilities, not only for emerging and frontier economies, but across the board. We agree with policy advice encouraging these countries to maintain strong policy and institutional frameworks to undergo the necessary macroeconomic adjustment, as well as to contain debt-related vulnerabilities. Moreover, as SOEs debt burdens have risen, we agree with staff that they should present well-designed and credible business plans as well as enhance cooperation with private firms to address over indebtedness and inefficiencies. The current context makes it more difficult for emerging and frontier markets to handle sudden changes in global risk aversion and the unintended consequences of advanced economies' monetary policy. In this regard, we would welcome analysis from staff, including in the Integrated Policy Framework, regarding the potential adverse spillovers of the continued easing cycle in advanced economies to EMEs. Enhancing debt transparency, reporting and monitoring is fundamental while considering countries' legal and institutional frameworks. While we strongly agree with the Fund that transparency and better reporting of debt should be strengthened, we believe that it is also important to take into consideration the particularities of countries' legal and institutional frameworks regarding how debt is reported.

We broadly agree with the findings on bank's dollar funding and its financial stability implications. We share that cross-border lending is the main channel through which an increase in US dollar funding costs is transmitted from lenders to recipient economies, especially when US dollar funding conditions are tightened. We highlight the importance of controlling vulnerabilities arising from the US dollar funding of non-US banks, and we see special merit in policy recommendations associated with the use of synthetic dollar funding as an instrument to compensate the shortage of US dollar financing during periods of stress. We concur with staff's policy stance regarding the importance of continue developing a stronger global financial safety net, including the provision of adequate IMF's resources. Moreover, we also share that having access to US dollar liquidity through swap lines with the Federal Reserve and central bank's international reserve holdings can contribute to produce a signaling effect to stabilize the global financial sector and reduce vulnerability during periods of stress.

We thank staff for the insightful chapter on "the link between sustainable finance and financial stability." We concur with the recommendation that policymakers have a role to play in promoting integration of sustainability considerations into investments and business decisions, as well as in developing standards, fostering disclosure and transparency, and promoting integration of sustainability considerations into investments and business decisions. However, we wonder what the scope of leadership in assessing risks that the authors suggest for regulators and central banks is. We agree that they can further support the development of

ESG-related markets, mainly by offering intellectual leadership and helping introduce best practices.

We strongly welcome the Fiscal Monitor on how to mitigate climate change, as it analyses not only the efficiency of the alternative mitigation instruments but also their social and political acceptability, which are also important dimensions to consider. While we agree fiscal instruments are among the most effective means to fight climate change, we wonder how conclusive the findings are regarding the efficiency of the carbon tax compared to other alternative instruments like feebates, subsidies to new technologies and regulation. Does the analysis consider that a disruptive change in technology could significantly change the price elasticities of energy and carbon demand? The idea of supporting new technologies seem to be somewhat underweighted in the chapter, which also favors carbon taxes versus feebates. Regarding a global international carbon price floor, while we see the merits of this proposal, we have doubts on the arguments presented in the chapter against differentiation between emerging market and low-income countries and more advanced economies. In any case, we recognize and support the need for global and cooperative mitigation solutions and actions. Finally, we highly support the need to implement compensation mechanisms, particularly considering their impact on income distribution.

We fully agree that climate change is a global threat and a macro-critical challenge, and therefore the Fund should continue to work on helping members to fulfill their commitment to the 2015 Paris Agreement. The October 2019 Fiscal Monitor is a welcome step in this direction. We strongly encourage staff and management to further build on this work by regularly updating this projection exercise in flagship reports and using the analytical tools to systematically assess climate policies in Art. IV reports. We support the integration of the assessment of climate change mitigation policies into the Fund's surveillance activity as part of the coming Comprehensive Surveillance Review and FSAP Review. We also consider relevant for the Board to discuss a Fund's strategic and comprehensive approach to climate change.

On a procedural note, we understand the difficulties of producing the flagship reports. However, this time around some of the documents were delivered especially late. These delays undermine the Board and our authorities' ability to provide meaningful feedback on the reports.

Mr. Beblawi, Mr. Geadah, Ms. Abdelati, Ms. Choueiri, Mr. Al-Kohlany and Ms. Merhi submitted the following statement:

World Economic Outlook

The downside risks from trade disputes, identified in the last WEO, have begun to materialize and are compounded by geopolitical tensions and rising financial vulnerabilities. The growth outlook has weakened and continuing risks threaten financial stability and further downgrading of growth. We agree with staff's view that we are at a 'delicate juncture' and with the need to prevent a further slowdown. Avoiding further escalation and resolving tensions is therefore the highest priority. It requires the will of major parties to dissipate tensions, which would help to achieve our shared objective of sustainable inclusive growth. Multilateral cooperation, which has suffered in recent years, needs to be revived for the Fund to effectively deliver on its mandate.

We note that growth in emerging markets and developing countries, as a group, is expected to be lower than earlier forecast, with a pick-up forecast for next year. The forecast growth in 2019 and 2020 has been downgraded in all regions, except Emerging Europe, due to a less severe slowdown in Turkey. Emerging Asia will continue to be the main engine of growth in the world economy. Its forecast of 6 percent growth will be aided by government support and the easing of monetary policy to offset the effects of tariffs and weakening external demand.

Growth in the new "Middle East and Central Asia" region was also revised downward on account of the impact of U.S. sanctions on Iran and slower oil production in Saudi Arabia. We regret the merging of MENAP and CIS economies as one group. Consideration should be given to separating Middle East and Central Asian economies. The Middle East region is identified as a separate region in many other publications, this distinction is helpful and facilitates comparisons with other organizations. For example, at the World Bank, the country grouping is "Middle East and North Africa". We recognize that there are diverse economies within any grouping, but it would be helpful to differentiate at least in the text and tables between oil exporters and importers.

Table 1.15 provides a useful illustration of the large number of countries that are forecast to grow at a slower pace per capita than AEs, and therefore continue to move away from income convergence. Figure 1.16 is striking in that it shows the per capita income of the majority of Fuel Exporters to decline over 2019-2024, a trend that reinforces the need for rapid diversification and economic restructuring.

Risks related to a further disruption of trade flows and supply chains cannot be overemphasized. Trade growth continues to slow down, reflecting mainly increased trade tensions and a slowdown in investment due partly to continued uncertainty. Moreover, as noted in the GFSR, financial markets are susceptible to abrupt shifts in sentiment, which may retrigger flight to safe assets and declines in global risk appetite.

Policy makers need to consider the risks to the outlook and to provide timely support for economic activity, where needed, to avoid a further downgrade to the near-term forecast. So long as inflation is subdued, monetary easing is appropriate to support growth, but monetary policy should not be used instead of structural policies that are well-recognized as necessary. Fiscal policy should be utilized where there is space without jeopardizing debt sustainability. Rising financial stability risks need to be tackled with macro-and micro-prudential policies. And structural reforms are needed across AEs and EMDCs to lift productivity and improve inclusiveness.

We welcome staff work in Chapter 3 with analysis of the role of structural reforms in EMs and LICs, a very timely and high priority area. Many of the findings and conclusions are intuitive and broadly accepted, and it is good to have supporting evidence from empirical research. For example, the conclusion that “these findings underscore the importance of carefully tailoring reforms to country circumstances in order to maximize their benefits” is already a broadly accepted Fund view. Nevertheless, it is useful to see that not all countries have reaped significant gains from “intensive reforms”, which underscores the need to further study the underlying factors and lessons to be learned. We agree that data limitations continue to constrain analysis in this area and welcome the new IMF reform data set. We emphasize the need to avoid duplicating the same reforms from one country to another in country programs. We strongly endorse the need to identify “binding constraints on growth”, and therefore call on staff to seek expert guidance as appropriate on the approach followed in specific country programs and the extent to which our structural reform conditionality is well-justified. Staff comments would be welcome.

Global Financial Stability Report

Since out last discussion, monetary policy in many advanced and emerging market economies shifted toward easing, against the background of heightened trade tensions and concerns about the global economic outlook, as we note in our WEO section. While the accommodative monetary stance is appropriate, the associated easier financial conditions could also contribute to higher vulnerabilities in the global financial system.

The October 2019 GFSR emphasizes risks associated with the further reliance on external borrowing by emerging and frontier market economies, rising corporate debt, and increasing holdings of riskier and more illiquid securities by institutional investors. We are concerned by the finding that vulnerabilities among nonbank financial institutions are now elevated in 80 percent of economies with systemically important financial sectors, a share similar to that at the height of the global financial crisis. The April 2019 GFSR recommended that countries consider developing macroprudential tools to contain vulnerabilities in the nonbank financial sector, especially in corporate debt funded by nonbank lenders, as few tools were available to regulators. Can staff comment on progress in this area? To what extent has this advice been included in bilateral surveillance? The October 2018 WEO highlighted concerns associated with growing cyber security and fintech risks. Can staff comment on developments in these areas, as well as progress in mitigation measures?

In light of these aforementioned risks, we support the report's key recommendations for stronger macroprudential policies, a proactive supervisory approach, as well as prudent sovereign debt management practices and frameworks. We appreciate the focus on the critical need for global policy coordination first and foremost to resolve trade tensions, as we indicate in our WEO section, but also to complete and fully implement the global regulatory reform agenda.

Chapter 4 examines the effects of increased debt portfolio flows to emerging markets and frontier markets, particularly the risk of excessive buildup of debt. In particular, state-owned enterprise (SOE) debt has been rising and now accounts for a significant portion of total emerging market debt securities issued externally (Figure 4.4). There is merit in staff's advice to improve the profitability, efficiency, and governance of SOEs, especially given their growing debt levels. We also agree that government guarantees on debt for systematically important firms should be linked to credible business plans and that more detailed disclosure of fiscal spending and guarantees related to SOEs should be encouraged. We look forward to continued close follow-up of SOE debt issues in the context of bilateral surveillance based on concrete evidence, while differentiating between country circumstances.

Chapter 6 explores the issue of environmental, social, and governance (ESG) principles that are becoming increasingly important for borrowers and investors. The chapter indicates that ESG issues may have material impact on corporate performance and may give rise to financial stability risks via exposure of banks and insurers and large losses from climate change. While the integration of ESG factors into firms' business models may help mitigate these risks, staff notes that ESG-related disclosure remains fragmented and sparse, partly due to associated costs, the often-voluntary nature of disclosure, and lack of standardization. We concur with staff that policymakers have a role to play in developing standards, fostering disclosure and transparency, and offering intellectual leadership in assessing ESG risks. We see a potential role for the Fund in supporting efforts in these areas and look forward to the additional planned work on ESG-related risk factors in the April 2020 GFSR.

We would have appreciated a follow-up on correspondent banking relationships (CBRs), as an update to the Box in the last report. Regional pockets of pressures remain, although the global value of cross-border payments may not have been affected by the withdrawal of CBRs so far. Concentration through fewer CBRs accentuates financial fragilities in some countries, which could affect growth and financial inclusion.

We welcome the new format of the GFSR and believe that the focus on policy messages should help increase traction with policy-makers.

Fiscal Monitor

We welcome the staff analysis and policy recommendations in this Monitor, which focuses on the important role that fiscal policy can play in climate change mitigation to secure a better future. This is a timely discussion as climate change will be an important public finance challenge for the foreseeable future. There is a need to advance global cooperation, especially given concerns with the implementation of existing commitments, as the paper highlights.

Governments can play a substantial role in both mitigation and adaptation policies, and we agree with staff that finance ministers are central to designing and implementing policies to meet emission reduction goals. Fiscal policies can influence investor and individual behavior and can direct spending on infrastructure and services that lower carbon emissions. Moreover, investments in adaptation, and well-designed fiscal measures to strengthen disaster responses, can increase countries' resilience to climate change.

Staff's assessment of the different mitigation strategies is quite useful, as well as the scenarios on the use of carbon pricing revenues for improving economic efficiency and income distribution. We note the numerous challenges of environmental taxation, including the effect of higher fuel prices on the poor and vulnerable. A challenge for policy makers will be to ensure that low-income households and vulnerable groups, which are usually negatively impacted by Environmental Tax Reforms, are compensated through policy changes (e.g. reduction of other taxes) or other mechanisms. Due consideration should be given to supporting the disproportionately affected workers or communities impacted by the displacement of high carbon industries. This will help build public support for environmental taxes. A good example is the Canadian "revenue neutral" carbon tax that returns nearly all of the proceeds to individuals, offsetting the potential negative impact of the tax.

Mr. Siriwardana, Mr. Goyal, Ms. Dhillon and Mr. Singh submitted the following statement:

WORLD ECONOMIC OUTLOOK

We complement staff for an excellent document. While Chapter 1 effectively analyses global prospects and risks, the other two chapters draw attention to important topics of sub-national regional disparities in advanced economies and role of structural reforms in emerging market and low-income countries. These findings with micro-foundations supplement to the macro outlook presented in the first chapter. We broadly agree with staff's assessment of prospects, risks and policy prescriptions, but would like to highlight a few points.

Chapter 1:

WEO forecasts a sharper slowdown in global growth during 2019 and a relatively weaker recovery in 2020 than that projected in July 2019. Staff forecast that is conditional on the materialization of various downside risks like aggravation of trade tensions, Brexit, geopolitical concerns, etc., appears to be a bit pessimistic. Latter is understandable, given the uncertainty about how each of these risks would pan out. We feel downside risk to growth for 2019 might have been somewhat overstressed considering the accommodating policy stance by most of the economies that may have positive impact in the near term.

On external sector outlook, it observes that global current account deficits and surpluses are projected to gradually narrow in 2019 and subsequent years. Similarly, it notes that creditor and debtor positions as a share of world GDP are projected to widen slightly this year, and then to stabilize as a share of world GDP over the forecast horizon. However, subsequently it is mentioned that over the medium term, widening debtor positions in key economies could constrain global growth and possibly result in sharp and disruptive currency and asset price adjustments. Staff may like to elaborate on this assessment.

We appreciate the in-depth analysis presented in the chapter on various aspects of growth and risk factors. Analytical portions on impact of trade tensions, world foreign direct investment, global automobile industry, and commodity market development are noteworthy and informative. Analysis of apparent contradiction in potential output estimates and low inflation in the developed world in term of Plucking theory of business cycle is quite revealing and significant.

As regards the forecasts for Indian growth, we note that these have been lowered significantly for 2019 and marginally for 2020. Slower growth in the first quarter appears to have influenced staff assessment, and it does not seem to have factored in strong policy steps taken by the government to revive the growth scenario. Several steps which inter alia include, monetary easing, resolution of NBFC liquidity stress, banks recapitalization and reduction in corporate income tax are expected to boost the investment as well as consumption considerably. Accordingly, GDP growth for 2019 as well 2020 is expected to be higher than the staff estimates. Staff may like to comment?

Chapter 2:

It provides a very useful analysis of subnational regional disparities in advanced economies (AEs). Though the study has been done in the context of AEs, topic is relevant across economies in the developed, emerging and the underdeveloped world. It would be useful if staff consider extending this work to emerging and low-income countries as well. Building on the analysis presented in the study, important conclusions can be drawn from the overall policy perspective. First, boosting educational and training quality help in adapting to the changing world and disproportionately benefit the lagging regions. Secondly, greater fiscal decentralization, enabling spatially differentiated policies, reduce regional disparities and lastly, less stringent employment protection regulation and less generous unemployment benefits impart greater resilience to trade and technology shocks.

Chapter 3

It presents a very comprehensive work on the role of structural reforms in reigniting the growth in emerging and low-income countries. Given the varied experience of economies regarding success of structural reforms, study makes a strong case for the reform process going forward. It observes that the impact of reforms on growth often depends on the prevailing economic conditions in the individual economy and to be successful, reforms need to be implemented in a package and should be sequenced appropriately. It also complimented the work with an interesting analysis of political costs of reforms. While we broadly agree with the findings, would like to make few observations. The study suggests that reforms are likely to be more successful during the periods of strong economic activity. However, this is ironical as reforms are generally needed when the economy is not doing well. Although study has tried to segregate reform measures that can be implemented even under poor economic conditions, criterion of this segregation is not obvious. The study makes another observation that electoral costs of real sector reforms, including labour reforms, are relatively low. This appears surprising as labour reforms is one of the most challenging areas to move forward. Staff may like to comment.

GFSR

In the wake of weakening global activity, persisting trade tensions and continued subdued inflation, central banks across AEs as well as many emerging market economies (EMEs) have undertaken easing, which in turn, has led to search for yield in some markets and over-valuations of asset prices. We agree with the assessment of the October Global Financial Stability Report (GFSR) that accommodative monetary and financial conditions seem to have helped mitigate near-term downside risks to global growth, however, unintended consequences of such policies are overstretched market valuations and buildup of large vulnerabilities in the global financial system. Thus, medium-term risks to global growth and financial stability appear to be skewed to the downside. We also concur with the following key vulnerabilities of global financial landscape that may emerge as major medium-term risk to global economic outlook: (i) rising corporate debt burdens; (ii) increasing holdings of riskier and more illiquid securities by institutional investors; and (iii) increased reliance on external borrowing by emerging and frontier market economies.

In the backdrop of easing global financial conditions, we endorse the staff assessment that these have given rise to further financial risk-taking by firms and continued buildup of debt. The report also highlights that slowing growth and escalating trade disputes may further weaken firms' profitability and in the event of a material economic downturn debt-at-risk could rise to the levels seen in the aftermath the global financial crisis. In some jurisdiction, a large fraction of corporate loans comes from banks, and thus, banks have significant exposure to corporate risks. This could bring in significant losses to bank and nonbank financial institutions, who have significant exposures to highly indebted nonfinancial firms, which the Report highlights as a major challenge for policy makers. We agree with the advice that policymakers should consider broadening the regulatory and supervisory perimeter to include nonbank financial intermediaries as warranted, particularly those with large exposures to firms. Notwithstanding the post-crisis global financial sector regulatory architecture for both banks and non-bank financial sectors and stronger regulatory oversight, how the balance sheet vulnerabilities in nonfinancial companies and non-bank financial entities have reached historical standards in several large economies? Could staff throw some light on this?

From the emerging market perspective, despite the subdued outlook for trade and global growth, external financing conditions were broadly favorable in 2019, mainly led by accommodative financing conditions in AEs. Equity flows have suffered the most from the shifting trade tensions, and a further escalation of tensions remains a serious risk for emerging and frontier markets. The GFSR Model estimates of credit spreads suggest that two-thirds of the spread tightening since 2010 - and most of the tightening in 2019 - can be attributed to external factors, such as a rise in global risk appetite. We believe that given the high sensitivity of EME credit spreads to global risk appetite, it is important for EMEs to build up domestic buffers, including encouraging domestic firms to undertake greater hedging of currency and interest rate risk to shield against sudden tightening of global financing conditions. The biggest dilemma before the policymakers in implementing tighter macroprudential polices to contain financial sector vulnerabilities, arises, when the economy is already facing significant headwinds of growth slowdown and tighter regulation can further choke the credit flow to the real economy. Could staff elaborate as to how policymakers can resolve this dilemma of timing the policy actions?

Keeping in view the growing debt burden in the frontier markets, we support the GFSR suggestion that creditors should emphasize timely resolution of debt distress cases underpinned by efficient creditor coordination processes to minimize the costs for both the issuer and creditors and that non-Paris Club creditors should consider the benefits of adopting sustainable lending rules.

The staff assessment of the dollar liquidity stress for the non-US banks that intermediate US dollars globally and the spillovers to the recipient economies becomes particularly important for EMEs as they are major recipient of capital flows from AEs. We support the assessment that international reserves can play a stabilizing role in the event of liquidity stress in the US funding markets and thus, this aspect should be considered while considering reserve adequacy. We reiterate our support for the global cooperation in terms of dollar liquidity swap lines and a stronger global financial safety net to preserve financial stability as a global public good.

FISCAL MONITOR

For climate change, what is being done is not enough. What is needed is a comprehensive approach which covers everything from education, to values and lifestyle and development philosophies, and a global effort to bring about behavioral change. In this context, we welcome the Fiscal Monitor's coverage on the role of fiscal policies in climate change mitigation, technology and coordinating strategies internationally and its role in emphasizing the strengthening of global action on climate change.

Carbon pricing for achieving Paris Pledges remains a complex issue and therefore its reliance as the most economically efficient instrument underplays the balance of efficiency and equity considerations. While Carbon pricing will certainly play a role in meeting the pledges, the appetite for imposing a price or the redistribution of consequential revenue will vary across countries, based on a range of aspects. National conditions, poverty eradication, energy access, stage of development, resource endowments and, most importantly, affordability remain critical principles and considerations. The fiscal monitor does a very good job of comparing carbon pricing with other measures as emission trading systems, regulations and feebates. Alongside, the usage of grouping, such as large emitting countries, G 20, is heterogenous, not synchronized with diverse results evident country-wise. There are wide differences in the relative impact of carbon pricing on GHG emissions across countries. Likewise, there are also differences in the relative impact of alternative mitigation approaches within countries. These results, along with the Fiscal Monitor recognizing the principle of common but differentiated responsibilities, suggest that country strategies could and should vary considerably. As such, adopting instruments domestically requires a case by case approach, and any generic mechanisms are not warranted.

In the climate change mitigation domain, ambition will need to be matched with a set of realistic, implementable and feasible policy mixes. A floor is unlikely to be universally acceptable, since its distributional impacts in many economies will be significant. A system of international transfers or for economies to provide enhanced technological support may offset some implementation disincentives but may entail visible problems with sustained implementation. As a collaborative approach, we support the focus on R&D and clean technology investments. Beyond this, countries still face the challenge of access to electricity and growing economies striving to achieve a better standard of living for its citizens, will aim for a threshold level of energy. Higher energy prices or inadequate sources of energy will have a negative impact on their access to energy. So even as this Chair has embarked on the implementation of one of the largest renewable energy programs in the world and aims to further the goal, the suggested the shift from fossil fuels appears unrealistic and even disruptive in the near term. Could staff offer more analysis on the spillovers resulting from this on economic growth and the timelines envisaged for a non-disruptive rollout bearing in mind the different economies and scales?

We concur with staff view that international cooperation is key to ensure that all countries do their part. Many countries have taken proactive steps mitigation actions on with many developing economies pledging more aggressive action as its Nationally Determined Contributions. For mitigation to work, fair burden sharing, climate lead bearing in mind cumulative historic stock of greenhouse gases and the materialization of financial and technical support cannot be wished away as we transition to climate actions. Further, global market power in both technologies and products will have an important footprint on the costs and implementation of mitigation approaches. Use of cleaner technologies or substitutes remain hampered by the intellectual property owned by just a few companies. To the extent that fiscal instruments and potential applications in Box 1.2 have been suggested to reduce the broader sources of greenhouse gases, could staff offer an analysis on the role of global market power and cost implications?

Overall, we welcome the analysis by the Fund which should encourage countries to undertake a collaborative approach to tackle climate change and take advantage of the Fund's capabilities in assessing the macroeconomic implications of alternative policy approaches. However, other agencies may be better positioned to provide a holistic mix of effective choices in economies constrained by fiscal and institutional capacity. Funds policy analysis and advice, in our view, should be more reflective of the national political economy and economic efficiency, and be tailored to local conditions and resources. Therefore, standardizing discussions on these issues remains premature.

Mr. Tanaka, Mr. Chikada, Mr. Harada, Mr. Nagase and Mr. Shimada submitted the following statement:

We thank staff for the set of comprehensive flagship reports and the informative analytical work. As these reports cover a wide range of issues, we would like to offer the following comments on the points where we want to emphasize in particular:

World Economic Outlook

Trade Policy

We agree with the staff's view that trade tensions and policy uncertainty remain to weigh on the global economy. To tackle these problems and secure sustainable and inclusive growth, constructive international discussions should be continued and international frameworks should be upgraded.

However, in the context of the international growing tensions, it would not be appropriate to treat "trade" and "technology" in parallel. While trade tensions are by nature negative and should be minimized as possible, the restrictions on the flow of technology are different in that there is an acceptable type of restriction such as one for national security purposes. If staff think it is necessary to say something about the restrictions on the flow for any reasons, please elaborate on what type of restriction it should be.

We fully agree on the importance of promoting free trade. Even though a recent update of procedures on exports of controlled items in Japan is mentioned as one of the examples of trade tension, it was just a necessary and usual business operational review of exports based on the international agreement. The trade volume of the affected items is very small and the trade that is properly carried out in accordance with the international rules has been permitted. Therefore, we believe that the update does not affect trade flow.

Global Imbalances

Excess imbalances and policy actions that threaten to widen such imbalances pose risks to global stability. On this point, we welcome the staff's analysis that global current account imbalances are projected to gradually narrow in 2019 and subsequent years after widening marginally in 2018.

However, the efforts to reduce imbalances should be continued. Under our G20 Presidency, the Japanese authorities took up global imbalances as its priority due to the importance of this issue, and we affirm that carefully calibrated macroeconomic and structural policies tailored to country-specific circumstances are necessary to address excessive imbalances and mitigate the risks. In light of this discussion, we recognize that the analyses in chapter 2 and 3 are meaningful for the member countries.

We encourage staff to analyze the problems surrounding global imbalances in depth fully utilizing their economic expertise and give further concrete policy advice to the member countries to enable fundamental solutions. In addition, we appreciate that the 2018 ESR and April 2019 WEO delivered the message that protectionist measures, including tariff actions, will not help to reduce excess global imbalances while decreasing overall trade volume.

Demographic changes

Regarding the Japanese policies, we took note the staff's view that fiscal policy should be geared towards long-term fiscal sustainability amid a rapidly aging and shrinking population while protecting demand and reflation effort. We would like to emphasize that our authorities are taking their every effort to smooth the impact of consumption tax hike this October.

Demographic changes should be recognized as one of the critical long-term challenges of the global economy. The problem of aging can have a great economic impact on all countries, not only Japan, as discussed in the G20, and we expect IMF to play a major role in tackling this problem.

Global Financial Stability Report

We take note that accommodative monetary policy is supporting the economy buffeted by the trade tensions, but at the same time, has increased financial vulnerabilities such as rising corporate debt burdens. To address the vulnerabilities, macroeconomic and macroprudential policy should be tailored to the economic situations that each country faces. Regarding monetary policy, we underscore the importance of data dependent policy and central banks' clear communication with market participants, especially given investors are anticipating very low interest rates for a long time and expecting further easing.

Corporate debt

We share staff's concern that the corporate bond spreads appear to be compressed relative to fundamentals due to strong demand from investors, even though corporate debts have expanded and the credit quality has deteriorated. On the other hand, the favorable corporate sector's funding condition is one of the aims and results of monetary easing. Hence, it is important to address corporate debt vulnerabilities without diminishing good effect of monetary easing. In this regard, while staff recommends a targeted approach against corporate debts, the macroprudential policy tools targeted corporate sector are limited as shown in table 1.1. Could staff elaborate more on the examples of the policy tools and analysis on the effects of already implemented tools?

Furthermore, leveraged loans are securitized and held by non-bank sector as CLO. With a view to encourage the institutional investors to manage the risk of investment portfolio appropriately, it is important to analyze more on the holding structure of CLO and the linkage with banking sector, and build the monitoring and regulatory framework. In this regard, some reports point out similarities and differences between current situation (leveraged loans and CLO) and past situation before financial crisis (subprime mortgage loan and CLO). Staff comments are welcome.

Debt Sustainability in emerging and low-income countries

Improving debt transparency and debt sustainability is an urgent task, given with the further increased debt vulnerabilities in emerging and low-income countries. In this regard, we commend the report for bringing up debt sustainability and pointing out that a large portion of non-Paris bilateral loans does not appear in government debt statistics as timely and useful. We encourage staff to continue promoting multi-pronged approach further in corporation with the World Bank and enhancing joint efforts of key players from both creditors' and borrowers' side.

US Dollar funding of non-US Banks

We agree with staff that US Dollar funding fragility in non-U.S. banks remains as a source of vulnerabilities. On this point, Japanese banks have expanded stable US dollar funding by increasing US dollar deposits. The staff analysis on the cost of US dollar funding, including unintended effect of regulations, is useful, given the importance of US dollar funding in macroeconomy. We encourage staff to cooperate with the BIS and countries' authorities to warrant better regulations.

Sustainable finance vulnerabilities

Appropriate and comparable ESG standards need to be developed to prevent "Greenwashing" and to ensure that sustainable finance actually contributes to sustainable development. In this regard, while the sustainable finance expands, what kind of roles should the Fund play?

Fiscal Monitor

Climate change is an urgent problem for the international community. Under the current situation that climate change has become a macro-critical issue for some countries, it is important for the IMF to conduct deep analysis on the problem from the viewpoint of their expertise and give necessary policy advice, including TA, to member countries. On this point, we welcome the effort of the October 2019 Fiscal Monitor, which focused on the possible fiscal policies, including carbon tax, based on the recent progress of the climate change.

Regarding the carbon tax, we recognize that promoting international cooperation which is supported by the facilitation of the IMF, is important. On the other hand, we would like to point out that further analysis or policy recommendation should pay due regard to the differences of energy efficiency among countries, such as industrial structure or reality of energy clean practices into consideration. In Japan, our authorities introduced a tax for climate change mitigation on the use of fossil fuels such as petroleum, natural gas, and coal depending on environmental load (from 2012). In addition, our authorities introduced Eco-Car tax incentive to promote the use of environmentally friendly vehicles.

However, the concrete measures, including fiscal policy, to reduce the greenhouse gas should be decided by each country while taking their own social, economic, and political circumstances into consideration. We would like staff to further deepen their analysis on the relationship between climate change and fiscal policy and other macro policies.

Ms. Levonian, Ms. McKiernan and Mr. Weil submitted the following statement:

We thank staff for the comprehensive and high-quality flagship reports which ably address policy challenges at both short and longer-term horizons, are well supported by analytical contributions which serve the membership well and continue to push essential issues like climate change further up the agenda. Overall, we support the well-chosen key messages and policy prescriptions, although we feel that the outlook may be a bit optimistic. While the research topics were well chosen, we see a gap in the area of trade and technology. We welcome the Fiscal Monitor's timely focus on climate, but also feel that the Fund's flagship research documents should always include an overview of the sovereign debt landscape.

World Economic Outlook

We broadly agree with the main WEO messages and the assessment of a "precarious" outlook. We agree with staff that the global outlook remains weak (and weaker than previously thought), noting that the 2019 growth forecast is the lowest in a decade and the projected pick-up in 2020 is lower than at the time of the April WEO; the outlook depends on the growth contribution of several very challenged economies; the downside risks, including geopolitical tensions, are significant and growing. That said, the impact on global growth in 2020 of the anticipated recovery in stressed EMEs may be optimistic and we see a recovery in these economies as highly uncertain. We agree with the policy prescription that countries should focus on removing policy-induced uncertainty and trade barriers, i.e., 'stop doing harm', given the role of trade actions in uncertainty, leading to slower investment and consumption and lowering trade growth, coupled with idiosyncratic factors.

We query the treatment of Brexit in the WEO. We acknowledge that the forecasts are based on the UK government's stated aim to agree to a deal to withdraw from the EU, but we view the treatment of the risks of a no-deal Brexit, by October 31, as too light. The likelihood of no-deal Brexit has clearly increased significantly since the last WEO, and it is unclear if the range of risks from different Brexit outcomes is fully factored-in, including but not limited to impacts on European industrial output through value chain disruption under a no-deal Brexit. Does staff's prior assessment of the impacts of a no-deal Brexit from Scenario Box 1 of the April 2019 WEO continue to adequately capture the spillovers involved, including on European value chains?

Along with the necessity to remove trade tensions, we agree with staff that monetary and fiscal policy actions will be needed to counter a global slowdown. A timely and well-calibrated policy response with an appropriate policy mix that avoids pro-cyclicality is needed. Given the existing degree of monetary policy accommodation, and buildup of financial vulnerabilities, we welcome staff's call for a rebalancing of the policy mix towards a more active fiscal policy. This should relate to the degree afforded by fiscal space and need to avoid further debt vulnerabilities. Going forward, we encourage staff to examine less conventional policy options to counter the slowdown that take into account the trade-offs faced by many economies that are seeking to stimulate growth without compromising fiscal sustainability and inflation.

We welcome the updated assessment of spillovers from trade tensions and we would have welcomed more analysis of the impact of trade actions on global technology value chains. The Fund is showing its responsiveness to the IMFC by championing the benefits of the rules-based multilateral trading system. In particular we welcome the updates made to the trade tensions scenario in Box 2 of Chapter 1 to account for spillover impacts on global productivity. We would emphasize that, while some countries benefit from trade diversion at least initially, the confidence, market and now productivity spillovers mean that ultimately every economy's output suffers. Whereas the July update highlighted technology-related tensions as important to the narrative around the outlook, that theme is almost entirely absent from this WEO. The Fund might provide analysis on the impacts on technology diffusion of technology-focused trade actions. For example, we would be interested in the linkages between the slowdown in the technology sector and the imposition of export controls on semi-conductors.

Service sector activity remains strong in advanced economies and is supporting consumer confidence, despite a pronounced slowdown in manufacturing. We would have welcomed further elaboration on the spillover risk from manufacturing to services sectors, given the interlinkages between the two, including an assessment of which countries and sub-sectors would be most vulnerable to such spillovers.

We commend staff for striking a more balanced tone in relation to the Fund's role in international tax cooperation, that positions the OECD at the center of the debate around reforming the global corporate tax system and clarifying the Fund's support role.

There is still ample room for a renewed impetus on structural reform in EMEs and LICs, and staff demonstrate in Chapter 3 that such an impetus could yield significant gains in output. We would caution that capacity could be a constraint in many economies, where tightly-sequenced reforms across multiple policy areas are necessary to achieve the modelled growth results (i.e., more than seven percent increase in output over six years). The Fund should carefully consider the implications for program design of the finding that structural reforms vary in effectiveness in good and bad times, given that the membership typically seeks Fund support in bad times. Given the current global trade environment we were surprised at the lack of profile afforded to the findings on the benefits of trade liberalization in Chapter 3. The Fund could consider how it can highlight these findings as part of its communication strategy. In light of the importance of governance to realising the growth benefits of structural reforms we see the identification of policies that have been most successful at improving governance as a research priority.

The creation of the structural reform database itself is a remarkable achievement. We recommend continued investment in the database to support enhanced surveillance and program conditionality. Can staff elaborate on what is needed to keep this database current (e.g., resources, data from authorities, cooperation across IMF Departments, etc.). Are there plans to expand its scope, for example to broaden the product market component beyond utilities?

The focus on subnational disparities was a welcome addition to the Fund's analytical lens, and we agree that investing in human capital plays a vital role in enabling lagging regions to adapt to change. Box 2.4 of Chapter 2 was helpful in providing examples of place-based fiscal policies, but it could have gone further in addressing the role of fiscal redistribution in reducing regional inequality. As staff outline, regional disparities often follow urban/rural divides rather than provincial or state boundaries. Recognizing that there may be data limitations, we would very much welcome future Fund analysis that drills-down within regions to better understand the drivers of disparities between rural and urban areas (e.g., energy prices).

Global Financial Stability Report

Financial stability risks remain elevated but broadly stable, while vulnerabilities have risen further, since April GFSR. Whereas growth-at-risk projections are largely unchanged over the last six months, easier financial conditions driven by a shift to more accommodative monetary policy has led to a further buildup of financial vulnerabilities. Such vulnerabilities could be destabilizing in the event of a sharp tightening of financial conditions, triggered by events such as a no-deal Brexit; a worsening of rate tensions; a sudden change in market expectations around the trajectory of monetary policy, or a re-pricing of risk for geopolitical or other reasons. We support the policy advice in the GFSR to tailor macroprudential policies to country circumstances in order to guard against stability risks.

It is worrisome that financial conditions have eased more than warranted by central banks' actions and communications. If driven by investors' belief that central banks will intervene to shore up asset prices and weakening growth, this may lead to a continued mispricing of risk. This gap between market expectations and central banks' policy stances puts a premium on data-dependent monetary policy and clear communications by central banks.

The challenges arising from growing sovereign and corporate debt vulnerabilities are significant. The current debt landscape highlights the need for cooperative action to curtail unsustainable lending and borrowing practices. In particular, debt transparency should be strengthened in line with Fund and World Bank advice. Non-Paris Club official creditors should consider the benefits of adopting sustainable lending rules and joining existing international fora for creditor information sharing and coordination. Corporate debt vulnerabilities in several systemically important economies are also a growing concern, as exemplified by the debt-at-risk analysis in the GFSR. While microprudential policy has a role to play in managing these vulnerabilities, such as through supervision of bank credit assessments, it may be insufficient. We would welcome further work by the Fund regarding possible policy actions for tackling these vulnerabilities given their widening prevalence.

We welcome the decision to examine sustainable financing and ESG-related risks as part of an overall strengthening of the Fund's focus on the climate agenda. We agree that lack of common methodologies and reporting standards, as well as the absence of consistent definitions of ESG, can hinder sustainable investments and their integration into decision-making. Initiatives that increase transparency to investors such as the EU taxonomy proposal (which will establish a common framework of sustainability criteria) will be important in bringing about the necessary clarity to accelerate private capital in this area while also eliminating greenwashing. Policymakers have a role to play to push progress in this area.

We also agree on the central role that the financial regulators have to play in managing climate risks, and in advancing the development of the ESG market. Regulatory and supervisory policies and practices should address the full financial risks of climate change. Specifically, it will be important to mainstream sustainability in risk management practices, so that environmental and social goals are integrated into financial decision-making. In addition, there will be transitional disruption in the move to a lower-carbon economy. It will be crucial that institutions such as the Fund play a role in raising awareness in this regard, particularly through analytical contributions.

The Fund should lead by example in the area of ESG. As we have stated previously in the context of the Fund's Investment and Trust Account operations, we are supportive of the Fund formalizing ESG considerations into its own investment policies.

Fiscal Monitor

Climate change considerations are macro-critical and global temperatures continue to rise due to inadequate national and global efforts. Many small states are already grappling with the effects of climate change, including from rising sea levels and the increasing frequency and intensity of natural disasters. We were pleased to see the comprehensive treatment of fiscal aspects of climate change in this year's fiscal monitor. We acknowledge that carbon taxes are part of a broader climate mitigation toolkit that includes feebates, regulations, and supporting policies to promote clean technology investments. The choice of policy instrument should consider country-specific circumstances. The Comprehensive Surveillance Review might consider how to include an assessment of climate change mitigation policies in multilateral and bilateral surveillance products.

The Fund should also focus on the financial stability implications of climate change. In addition to fiscal policy considerations, the importance of climate-related issues for financial stability and monetary policy have become increasingly clear. We welcome the addition of the IMF to the Central Bank's and Supervisors' Network for Greening the Financial System (NGFS). This will help promote best practices in climate risk management for the financial sector. We also welcome the Fund's work in incorporating climate risks into stress tests, as was done, for instance, for the recent FSSA for The Bahamas. The FSAP review might consider the feasibility of assessing financial system sustainability as part of all FSAPs.

The Fiscal Monitor should always include at least a brief survey of the global debt landscape. While we welcome the GFSR devoting a chapter to public debt vulnerabilities in emerging and frontier markets, current debt dynamics and associated vulnerabilities dictate some minimum degree of coverage of debt issues in every edition of the Fiscal Monitor.

Board Engagement

It is regrettable that the core chapters of the flagships were circulated to the Board with too little time for an effective and broad review including by authorities. This hinders the Board's ability to exercise its governance and oversight role to the optimal degree. Our authorities expect to engage on the flagships and use them to prepare Governors for the Meetings. We would welcome a discussion on creative approaches to improving circulation timeliness in the future (e.g., circulating drafts with placeholder text/data).

Ms. Mahasandana, Mr. Tan, Mr. Abenoja, Ms. Latu and Ms. Yoe submitted the following statement:

We thank staff for the comprehensive set of flagship reports and the rich analytical chapters. We broadly share the assessment of the global outlook and risks, as well as the policy priorities. We offer the following comments for emphasis.

The outlook is precarious, and the immediate priority is to resolve the trade tension. Downside risks have materialized since the April 2019 WEO, with trade tensions weighing on confidence, investment, global trade and growth. While monetary policy accommodation has partially cushioned the impact of the trade tariffs and tensions for now, limited policy space is quickly being used up, leaving the global economy vulnerable to a deeper downturn.

The projected recovery in 2020 is predicated on a durable stabilization of countries currently in macroeconomic distress and on continued healthy performance of faster-growing emerging and developing economies. This cannot be taken for granted. We noted the emerging and developing Asia's continued role as the engine of the world economy. We welcome a further elaboration of the role of the economic performance of the emerging and developing Asia in supporting the 2020 recovery. How would the growth projection for 2020 look like, should the rebound in the stressed economies be weaker than expected or should economic activities in the emerging and developing Asia slow down due to intensified trade tension? We also welcome staff's comments on the policy advice under such a scenario.

We strongly support the Fund's analytical work on highlighting the urgency and gravity of the need to defuse trade tensions, such as Scenario Box 2 of the WEO. The Box clearly highlights the economic damage that trade tensions bring in the medium and the long term, particularly through dampening productivity. As further work, we suggest that staff could look at how the global and regional supply chains would be affected by trade tensions and a marked slowdown in China's exports. Compelling and relevant economic analysis can be a powerful tool to gain sway with policymakers and enhance policy traction. We encourage the Fund to continue to advocate for a swift resolution of trade tensions, supported by objective and rigorous analysis of their macroeconomic impact. In this regard, we welcome staff's comments on the plans for further research in this area, and whether there are plans to look deeper at the impact of trade tensions on technological diffusion.

We welcome the focus on climate change in the flagship reports and support the call to address this shared challenge. We appreciate the comprehensive analysis in the Fiscal Monitor of the fiscal policy options to help reduce carbon dioxide emissions. We encourage the Fund to provide relevant and well-grounded policy advice to assist member countries in assessing the trade-offs between fiscal spending on ex-ante resilience building, development needs, and protection of the vulnerable groups while maintaining debt sustainability and addressing inflationary pressures of the fiscal policy measures.

There could be significant transition risks associated with climate change initiatives. This could have an impact on policies and the financial sector. We wonder if staff intends to look at the potential implications of climate change on inflation and monetary policy? The financial sector can help to facilitate the transition to a more sustainable economy by mobilizing funding to sustainability goals. We welcome Chapter 6 of the GFSR which highlighted policies to foster the growth of sustainable finance. As part of its broader efforts in developing sustainable finance for the region, the ASEAN Capital Markets Forum has developed the ASEAN bond standards to support green, social and sustainable objectives. We encourage the Fund to collaborate with other IFIs such as the World Bank to develop financial products to assist countries in climate risk management.

Overall, we support the integration of climate change in the Fund's surveillance on a risk-based approach, tailored to country priorities and focused on the most pertinent risks, including climate considerations where relevant, for each country.

While dealing with short-term challenges, policymakers must not lose sight of medium-term priorities, including boosting growth potential and promoting inclusive growth. We welcome the analysis in the WEO Chapter 3 and note the empirical finding that structural reforms deliver sizeable contributions to output growth over the medium term. That said, we agree that the appropriate packaging, sequencing, prioritization and timing of the structural reforms, in view of country circumstances and political economy, are key to maximizing payoffs. Country ownership of the reforms is also fundamental to their success. Therefore, we encourage clear communication of the reforms and their impact to the public.

In support of promoting inclusive growth and addressing inequality, we welcome the analysis and findings in the WEO Chapter 2 that regional disparities among advanced economies (AEs) can be reduced with well-calibrated national policies that promote productivity, employment and growth, taking into account the differences in the regions. We note the findings that despite the downward trend, regional disparities in emerging market economies (EMEs) remain about double those in AEs on average. Together with the precarious global outlook, we see merit in conducting a similar study of EMEs to better equip policymakers in EMEs with tools to lift productivity and employment, and thereby boost medium-term growth potential.

As policymakers refocus their efforts on supporting economic growth, they must remain mindful of the impact on financial stability. Concerns on financial stability are growing, as vulnerabilities are elevated, particularly in the non-bank and the non-financial sectors, and continue to build as financial conditions ease further at a time where they are already accommodative. Policymakers will need to balance growth and financial stability especially at this delicate juncture with a well-integrated policy package. In this regard, we welcome the work on the Integrated Policy Framework and urge the Fund to prioritize efforts in this area.

We note the policy advice for more active use of fiscal policy to stimulate demand where monetary policy space is limited. However, with increased concerns about debt sustainability in emerging markets, we reiterate the need for policy advice to balance between the use of fiscal space to support growth while ensuring debt sustainability and prudence to deal with long term challenges such as demographic shifts and climate change.

We appreciate the analysis of Chapter 5 on US dollar funding fragility and the potential spillovers to recipient economies. Given the limited ability of loan recipients, many of which are emerging markets, to turn to other sources of US dollar borrowings, we underscore the effectiveness of swap line arrangements between central banks, and the case for a stronger global financial safety net such as those provided through flexible credit lines. We welcome staff's comment on what they see the Fund's role to be in addressing the US dollar funding fragility?

Mr. Mahlinza, Ms. Mannathoko, Mr. Obiora, Ms. Gasasira-Manzi, Mr. Nakunyada and Mr. Sitima-wina submitted the following statement:

We thank staff for the comprehensive set of reports, which succinctly capture the major strands and challenges in the global economy. The pace of global economic activity is projected to significantly weaken in 2019 underpinned by a slowdown in both advanced economies (AEs) and emerging market and developing economies (EMDEs). Nevertheless, growth is projected to rebound in 2020 and beyond, on the back of normalization in several emerging market economies that are currently underperforming or experiencing macroeconomic distress. That said, growth in systemic economies, which account for close to half of the global GDP, is expected to moderate.

World Economic Outlook:

We note that the outlook is subject to significant risks, including the failure of key EMDEs to recover from severe strain, worsening geopolitical and technology tensions, a no-deal Brexit, and a further escalation of trade tensions and associated increases in policy uncertainty. In addition, the deterioration in financial market sentiment remains a major risk for vulnerable economies, as is the risk of adverse climate events. At the same time, staff's latest estimation of the probability of a 1-year ahead global economic downturn shows a higher probability than estimated during the Spring 2019 (figure 1.23). Against this backdrop, we agree that the global outlook remains precarious, with a likelihood that global growth may underperform going forward. Consequently, we are of the view that staff forecast for global growth in 2020 may be overly optimistic. Staff comments are welcome.

We broadly agree with the policy priorities in the WEO and the need for urgent policy actions to boost potential growth, improve inclusiveness and strengthen resilience. At the same time, we recognize that the bulk of the vulnerabilities that threaten sustainable and inclusive growth would need effective global cooperation. We therefore see a role for the Fund to continue emphasizing the individual country and global benefits that accrue from multilateral cooperation and to advocate urgent global cooperation amongst world leaders who have real leverage to change the course of current economic developments. In this regard, we agree with the focus areas for closer multilateral cooperation, including trade and technology, international taxation, global financial regulatory reform, climate change and governance and corruption. With respect to international taxation, although there has been some progress, there is scope to enhance cooperation, including by ensuring that the global decision-making framework is guided by quality analysis on developing countries.

We thank staff for the analysis in Scenario Box 1 on the implications of advanced economies reshoring production. We agree that in the event these developments materialized, the outcome would be a less open global economy that could constrain technology diffusion and cause global activity to fall further. Staff comments on the policies that should be undertaken by EMDEs, especially commodity-dependent economies, that are trying to diversify their economies to better fit into the global value chains, would be appreciated? That said, we underscore the need for collaborative efforts to reduce trade tensions, and cooperatively strengthen and modernize the rules-based multilateral trading system. While there may be some merit in the suggestion to allow countries that wish to move further and faster in WTO trade negotiations to do so, we wonder whether such a framework would allow for the concerns of slow movers to be addressed at a later date. Staff comments are welcome.

We commend the work by staff in Box 1.2 on the decline in world foreign direct investment (FDI) in 2018, which highlights that most of the decline in FDI reflects purely financial operations by large multinational corporations. It is noteworthy that this sharp decline has had no meaningful aggregate impact on emerging market economies, since the bulk of FDI flows reflect tax and regulatory optimization strategies by large multinational corporations. We agree that this is an important piece of work that should bring clarity to the recording of FDI transactions in the balance payments. We look forward to further work that will clarify the nature, composition and recording of FDI flows.

For sub-Saharan Africa (SSA), we note that while some of the largest economies continue to experience subdued growth, about 20 economies in the region are projected to realize solid growth, exceeding 5 percent. In per capita terms, these economies are expected to grow faster than AEs. We are however, concerned that there is still a sizeable group of economies across SSA and in the MENAP region, with close to 1 billion population, that is projected to fall further behind, impacting the speed of convergence with AEs. In this regard, we support the policy priorities recommended for EMDEs, including the need for a more comprehensive approach beyond implementing the right macroeconomic policy mix, including accelerating structural reforms to build resilience and support strong, sustainable and inclusive growth.

We welcome the focus of chapters 2 and 3 on structural policies for both advanced economies and EMDEs, respectively. We agree that there is scope for further reforms in low-income countries (LICs) and that this could result in considerable gains in growth and enhance the speed of convergence. Further, we concur that getting the reform package and sequencing correct can make a significant difference. In this regard, we emphasize that recommendations for major simultaneous reforms should take into consideration the capacity, political economy and the cost of reforms. The Fund and other development partners can play an important role in implementing structural reforms, through policy advice, and technical and financial assistance.

Global Financial Stability Review:

We share staff's assessment on emerging risks to global financial stability, especially in the non-bank financial sector, and reiterate the need for completion of the global regulatory agenda. Diminished global growth prospects have prompted easing of financial conditions, the reallocation to riskier assets by institutional investors, and a build-up of financial vulnerabilities. Against this background, we support the call for urgent measures to strengthen and expand macroprudential toolkits, deploy tailored macroeconomic and financial policies, and adopt a targeted approach to address sectoral challenges. Considering that yield curves have either inverted or flattened in major economies, could staff clarify whether they see an imminent recession?

We also note with concern the worsening corporate debt vulnerabilities in systemically important countries, amplified by greater risk-taking. Moreover, debt-at-risk is approaching the levels seen during the global financial crisis, while the potential risk of higher credit losses for financial institutions exposed to heavily indebted corporates are increasing. Against this background, we see merit in prioritizing decisive measures to strengthen financial regulation and oversight, improve disclosures, and widen the supervisory perimeter to include non-bank financial institutions.

Despite the subdued trade and global growth prospects, we note that external financing conditions for emerging markets (EMs) remain favorable in 2019. This could encourage the accumulation of new public debt and raise rollover and debt sustainability risks. At the same time, increased portfolio debt flows to EMs and frontier markets alongside rising SOE indebtedness, could further complicate debt dynamics. Against this background, we, underscore the need for sustained Fund technical support to strengthen debt management practices and re-orient debt portfolios to reduce vulnerabilities. Could staff clarify the expected interplay between the equity outflows experienced in EMs since the first quarter of 2019, and the debt portfolio inflows, and exchange rate implications, in the near to medium term? Further, we wish to underscore the need for an enhanced framework to harmonize lending practices among creditors. In addition, sustained efforts will be required to build resilience to capital flow reversals as well as strengthen the monitoring of US dollar funding fragility in non-US banks.

Fiscal Monitor:

We appreciate the excellent report on mitigating climate change and welcome the quantitative analysis of the costs and benefits associated with the implementation of various mitigation approaches. We continue to emphasize that the impacts of climate change are onerous for smaller developing countries, and that urgent measures are required to contain emissions to limit the severity and frequency of extreme weather events. Just this year, a number of SSA countries experienced severe property and infrastructure damage from cyclones, alongside crop losses and displacements of communities due to severe drought or flooding. We acknowledge the swift support received from various international organizations and development partners.

International cooperation remains critical in efforts aimed at mitigating climate change. In this regard, we support staff’s call, urging the G20 and particularly, the three largest emitters, to take the lead in reducing greenhouse gas emissions. In the SSA region, we note that many countries are already pursuing renewable energy projects funded in part by the World Bank and others; and promoted through regional development strategies. Furthermore, many developing countries pledged more aggressive mitigation measures, but this was contingent upon external financing and technical support to help finance disaster recovery and adaptation. We therefore encourage advanced economies to honor the commitments made under the Paris Agreement and look forward to the mobilization, from 2020 onwards, of $100 billion a year from public and private sources to support mitigation and adaptation investments.

We welcome staff's assessment of various mitigation strategies to reduce fossil fuel emissions; and agree that carbon taxes levied on the supply of fossil fuels is the most effective and efficient option. However, in determining the magnitude of the carbon tax, consideration should be given to revenue elasticities especially in low-emission emerging economies that are still struggling with high poverty rates. Staff comments on this are welcome. Further, we would like to underscore the opportunity costs and the price implications of introducing measures such as a global carbon tax. Many SSA economies and other developing economies are likely to be negatively impacted by such measures, through reduced fossil fuel production and lower export revenues. Given these potential revenue losses, we wonder whether low emission LIDCs could be assisted to meet their renewable energy investments needs. Staff comments are welcome.

Mr. Lopetegui, Mr. Di Tata, Mr. Morales, Mr. Rojas Ulo, Mr. Corvalan Mendoza, Ms. Moreno and Mr. Vogel submitted the following statement:

World Economic Outlook

The World Economic Outlook (WEO) has reduced once again its forecasts for global economic growth as trade and geopolitical tensions have continued to escalate. The forecast for 2019 has been revised downward from 3.2 percent in the July 2019 update to 3 percent in the current WEO, the lowest growth since the 2008-09 global financial crisis, while the projection for 2020 has been reduced slightly to 3.4 percent. Some of the concerns and risks this Chair expressed during the discussion of the WEO update have materialized, with real GDP growth for 2019 now expected to be lower for most countries and regions.

Considering current trends and prevailing uncertainties, the increase in growth projected for 2020 may be on the optimistic side. Seventy percent of such increase is based on a pick-up in activity in some emerging market countries (such as Brazil, Mexico, and Russia) and lesser output contraction than in 2019 in other economies of the same group. At the same time, as noted by staff, the pickup in 2020 also relies on "financial market sentiment staying supportive and continued fading of temporary drags", notably in the euro area, as well as on the continuation of accommodative monetary policies in advanced economies and policy stimulus in China. However, these factors might turn out to be insufficient in case of a further escalation of trade tensions or a disorderly Brexit (the WEO forecast assumes an orderly Brexit followed by a gradual transition to the new regime). In addition, geopolitical tensions continue to be a source of concern, especially considering the recent episode that led to an escalation of tensions in the Persian Gulf.

On the positive side, the WEO notes that global external imbalances are projected to narrow gradually in 2019 and subsequent years. Among surplus countries, current account imbalances would decline gradually in oil exporters, advanced European creditors, and advanced Asian economies, while a modest widening of China's current account surplus in 2019 is expected to be reversed over the medium term. At the same time, the US current account deficit is projected to narrow as domestic demand growth slows. Nevertheless, excess current account balances would decline modestly in 2019 and the medium term.

The report rightly underscores that fiscal space has been reduced in many countries worldwide. Gradual fiscal consolidation is necessary in the United States to avoid exacerbating the risky debt dynamics, which shows a clear upward trajectory, while some surplus countries with fiscal space could provide fiscal stimulus. At the same time, monetary policy faces limited room to play a very active role in the future, particularly in the euro area. We agree with staff that while easier conditions have been beneficial since the global financial crisis, "they could also lead to an underpricing of risk in some financial market segments", and that a process of financial deregulation or lighter supervision may exacerbate those risks. China continues to face a difficult trade-off between supporting near-term growth and containing leverage through regulatory tightening. China's growth rate is projected to decline below 6 percent in 2020, which constitutes a concern for emerging and developing countries, especially for those that rely strongly on exports of commodities. Turning to Latin America and the Caribbean, the rate of growth for the region has been significantly revised downward for 2019 and 2020. In particular, South America's real GDP is now projected to decline by 0.2 percent in 2019 owing to negative growth rates in Argentina and Ecuador, a sharp contraction in Venezuela, and weak positive growth in Brazil. Regional growth is expected to increase to 1.9 percent in 2020 owing in part to a slower decline in Argentina, a moderation of the contraction in Venezuela, and stronger growth in other countries, including Brazil. The report emphasizes the main challenges faced by several countries, including structural rigidities, subdued terms of trade, and fiscal imbalances.

Against this backdrop, we agree with staff that risks around the WEO baseline scenario remain skewed to the downside. In fact, as noted before, some of the assumptions on which the scenario itself is based may be too optimistic. Under these circumstances, what are the policy options available in case of a further sharp slowdown in economic activity? The WEO suggests that in countries where fiscal space exists fiscal stimulus could be provided, while in those where fiscal consolidation is necessary, its pace could be adjusted if market conditions permit. However, this might not be enough to avoid a prolonged period of economic weakness.

Chapter 2 of the WEO addresses the question of why regional disparities in advanced economies have risen since the late 1980s. At this stage, we take the conclusions as preliminary, given that the extent of regional disparities differs across advanced economies, comparability of regional units is more complicated than for customary economic units of analysis, and the period of analysis is relatively short (2000-2019). With these caveats, the Chapter notes that growing sectoral productivity differences appear to explain widening disparities across subnational regions, mirroring trends in overall income inequality in many advanced economies. This trend is reinforced by the sectoral employment mix in lagging regions, which is leading to specialization away from dynamic service sectors. Moreover, lagging regions appear to suffer more than other regions from the impact of technology shocks, which seem to have noticeable and persistent effects on labor markets and unemployment. Staff indicates that, in contrast, shocks from increased import competition do not seem to have marked average effects on regional unemployment and tend to impact labor force participation only temporarily. It would be useful if staff could provide a better explanation of the reasons behind these two results, differentiating between the impact of each type of shock.

Regarding the policy recommendations, we agree that national policies that facilitate labor reallocation and flexible product markets should be given priority. At the same time, it is important to ensure that relevant safety nets are preserved, and that appropriate investment is deployed to improve human capital through education and training. Staff also indicates that there is a strong case to advocate greater fiscal decentralization to address regional disparities. We are not convinced, however, that there is a strong justification for such approach, as international experience shows that poor regions under decentralized regimes often find it hard to rely on their own resources to address regional growth and unemployment. Staff comments are welcome.

Chapter 3 of the WEO deals with the role of structural reforms to reignite growth in emerging market and low-income economies. We welcome the staff’s focus on this topic, given the importance of structural reforms for emerging and developing economies in a context characterized by very limited space for macroeconomic policies and waning chances of a new commodity price boom. The empirical analysis finds that a reform agenda across several areas (governance, domestic and external finance, trade, and labor and product markets) might raise output in the average emerging and developing economy by more than 7 percent over a six-year period. The Chapter also deals with the implications of political and electoral considerations, which may constitute an important deterrent to structural reforms.

Staff should be commended for its efforts to develop a dataset of structural reforms for a large sample of developing and developed countries. We have three comments on this issue. First, we would appreciate it if staff could briefly elaborate on the criteria used to determine the depth of reforms (which resulted in indicators varying between zero and one), as well as on the implications of focusing only on "de jure" regulations which may not always capture "de facto" changes. Second, the indicators on page 8 show that the labor market is the only structural area where there was no progress between 1973 and 2014. On this basis, is it fair to conclude that labor market reform is politically the most difficult? Third, an issue that deserves to be highlighted in the paper is that the indicators on trade reform focus only on reductions in import tariffs, without capturing the evolution of non-tariff barriers. Clearly, a more comprehensive approach is needed.

Box 3.1 on the political effects of structural reforms and Box 3.2 on the impact of crises on structural reforms provide some interesting results. We concur with the view that governments should act swiftly following an electoral victory to implement reforms; that reforms are best implemented when economic conditions are favorable; and that policymakers should implement up-front complementary measures to mitigate any adverse effects of reform on income distribution, including by strengthening social safety nets. One apparent result from the exercise is that there has been no noticeable improvement in governance in the average emerging market and developing economy, which is surprising given the increased emphasis of the international community on this reform area.

Global Financial Stability Report

We concur with the assessment in the Global Financial Stability Report (GFSR) that medium-term risks to global growth and financial stability continue to be skewed to the downside. As described in the report, financial markets have been impacted by escalating trade tensions and an uncertain global outlook. Easy financial conditions in a context characterized by accommodative monetary policies have prompted investors' search for yield, leading to stretched valuations in some markets and growing vulnerabilities in some sectors and countries. Against this backdrop, we share the conclusion that macroprudential policies should be tightened as warranted, with the appropriate policy mix between macroeconomic and macroprudential policies being tailored to the specific circumstances faced by each economy. In this regard, we believe that the recommendation at the end of page 5 of the Executive Summary that economies facing a significant slowdown should focus squarely on more accommodative policies should be qualified by considering available policy space on a case by case basis.

The report notes that following efforts to strengthen regulatory frameworks after the global financial crisis, expectations about bank profitability have declined and some banks exhibit low capitalizations levels. At the same time, lending to vulnerable sectors is increasing potential losses and vulnerabilities remain high in the insurance sector and are elevated among non-bank financial institutions in economies with systemically important financial sectors. Could staff comment on the main reasons why countercyclical capital buffers have so far been used only infrequently as a tool to increase the resilience of the banking sector? Could it also elaborate on the downside risks associated with the housing market? At the global level, we agree with staff on the need to complete and fully implement the global regulatory reform agenda, ensuring that there is no rollback of regulatory standards.

Key specific vulnerabilities discussed in Chapters 2, 3, and 4 of the GFSR include: (i) rising corporate debt burdens—a trend already highlighted in previous reports; (ii) increasing holdings of riskier and more illiquid securities by institutional investors, such as pension and insurance funds; and (iii) increased reliance on external borrowing by emerging and frontier market economies. Staff usefully presents several actions to address each of these vulnerabilities, emphasizing, among other things, the importance of increasing disclosure and transparency in nonbank financial markets and the oversight of nonbank financial entities. Could staff elaborate further on possible prudential tools for highly leveraged firms that could be applied in those cases where overall corporate sector debt is systemically high? Another important issue raised in the report is that the easing of financial conditions in advanced economies has supported a rebound in capital flows to emerging markets, which makes some countries more susceptible to a sharp tightening in financial conditions. With private and public debt already high in some countries, easy financing conditions are also encouraging further excessive buildup of debt, rising rollover and debt sustainability risks. We agree with staff on the need to improve transparency and disclosure of SOE data, reduce reliance on collateralized debt and, more generally, continue to support the multipronged approach to addressing emerging debt vulnerabilities.

Chapter 5 of the GFSR expands the work on potential liquidity risks in the dollar funding of non-US banks highlighted in the April 2018 report. Staff notes that in the run-up to the global financial crisis, lending in US dollars by non-US banks became a crucial transmission mechanism for shocks originating in the major funding markets for US dollars. Regarding the policy implications, staff notes that some regulatory reforms adopted after the global financial crisis may have unintentionally made US dollar funding more prone to instability, leading to increase reliance on foreign exchange swaps and higher costs and volatility in the swap market. Although staff does not suggest that those regulatory reforms should be rolled back, it highlights the need to consider the tradeoffs involved. Could staff elaborate further on these tradeoffs? We agree with staff that regulators should monitor the US dollar funding fragility of local banks and develop or enhance currency-specific liquidity risk frameworks.

Chapter 6 of the GFSR discusses the increasing role of sustainable finance, which incorporates environmental, social, and governance (ESG) principles into business decisions, economic development, and investment strategy. An important question is why the market per se has not been able to incorporate ESG principles into the investment process. In this regard, lack of consistent methodologies and reporting standards and mixed evidence about performance seemed to be relevant issues. At the same time, issuers of ESG-compliant assets face difficulties in realizing immediate gains, in part due to the long-term nature of the positive externality. Under these circumstances, we agree with staff that closing data gaps will be crucial for investors. In addition, regulators and central banks can support the development of ESG-related markets by helping assess risks, while policymakers could consider incentives to encourage green finance markets.

We agree that the Fund should continue to incorporate ESG-considerations when critical to the macroeconomy and look forward to the discussion on the appropriate incorporation of climate change issues in FSAPs, including in stress tests, in the context of the upcoming FSAP review. Lastly, we concur with staff on the importance of multilateral cooperation on standards and taxonomies and on the need for fiscal and structural measures to address carbon emissions and support investment in infrastructure for a sustainable development.

Fiscal Monitor

The October 2019 Fiscal Monitor (FM) focuses on how to mitigate climate change. The FM rightly argues that, among the various alternatives available, carbon taxes and similar arrangements to increase the price of carbon constitute the single, most powerful, and efficient tool to reduce domestic CO_2 emissions on fiscal, environmental, and economic grounds. However, in the absence of accompanying measures, carbon pricing may face stiffer opposition compared with other arrangements, such as feebates and regulations, which are less efficient but have a smaller impact on energy prices. Thus, when analyzing mitigation alternatives and possible combinations of those alternatives, governments need to carefully consider the trade-offs involved in terms of economic efficiency, price predictability, ability to raise revenue, and ease of administration.

Notwithstanding that many countries have implemented carbon price initiatives, the FM notes that the magnitude of the required effort is enormous, given that the current global average carbon price is only $2 a ton, a small fraction of that consistent with the target of limiting global warming to 2ºC or less, which is estimated at $75 a ton in 2030. We greatly appreciate the cross-country assessments of carbon pricing and other mitigating approaches shown on page 12, including Figure 1.2 that presents the projected reduction in fossil fuel CO_2 from carbon taxes for several countries. The figure shows clearly that there is a large cross-country dispersion, which reflects cross-country differences in the stringency of mitigation pledges (ranging widely from zero to 40 percent) as well as different price responsiveness of emissions.

An important message underscored by the abovementioned analysis is the need for greater international price coordination. In this regard, we agree with staff that an international carbon price floor might reinforce the Paris Agreement process by providing assurances against losses in competitiveness and addressing free-rider issues. As argued in the report, price floor requirements could accommodate both carbon taxes and Emissions Trading Systems (ETS) from both a climate and international tax perspective.

We share the view that mitigation policies need to be accompanied by other measures to address political and social sensitivities. In this regard, we welcome the analysis of possible redistributions of the carbon tax to compensate vulnerable groups and communities. Research and development into clean technologies, complementary infrastructure, and financial sector policies could play an important complementary role in implementing carbon pricing.

Mr. Mojarrad, Mr. Sassanpour and Mr. Nadali submitted the following statement:

World Economic Outlook (WEO)

The world economy is on a slippery track, global growth is losing momentum fast, and the economic downturn is broadening geographically. The US-China trade and technology conflict has escalated markedly since the April 2019 WEO, continuing to exact a heavy toll on the global economy through generalized policy uncertainty and weakening business confidence, as well as due to negative repercussions on financial market sentiment. These developments are adding pressure to the cyclical downturn already in train. The geopolitical tensions and the intensification of US sanctions on Iran and conflicts in some oil-producing regions are pressuring the oil market and weighing on the global economy. The global economic growth is the weakest it has been since the global financial crisis, global trade growth has come to a virtual standstill, and global supply chains have been disrupted. Risks to multilateralism and resort to inward-looking policies have never been so strong in the past few decades. It is uncertain to what extent the damages are reversible and confidence could be fully restored even if the trade and technology conflicts are resolved soon. Staff comments are welcome.

The near-term outlook remains weak and is also fraught with significant downside risks. Growth is anticipated to moderate in several systemic economies with knock-on effects on smaller open economies, particularly countries heavily integrated in the global supply chains. The WEO projection of a moderate global economic recovery in 2020 is predicated on stronger growth in India and tentative expectations of economic turnaround in a small group of emerging market economies in distress or with weaker macroeconomic conditions in 2019 due to idiosyncratic factors. In staff view, what is the worst-case scenario for global growth in 2020 and over the medium term if these economies do not recover or stabilize sufficiently and durably?

Unlike at the onset of the last global crisis, the policy options are clear but require political fortitude on the part of major countries to remove a key policy uncertainty by working towards a permanent solution to the trade disputes within a rules-based multilateral framework in order to forestall further degradation of the global economy and trade. This is critical since the policy space—and especially monetary policy—in major economies is much more constrained, and only a few large economies have the fiscal space to boost domestic demand sufficiently to substitute for waning external demand without compromising their debt situation. This puts a premium on structural reform implementation. The overarching priority for almost the entire membership is to build or reinforce resilience in preparation for the next global downturn, which is becoming increasingly hard to prevent. We support staff's call to prepare contingent fiscal policy to be able to respond quickly and effectively should the economic slowdown deepen, placing emphasis on measures that would help boost output in the short run and increase productivity growth and labor participation in the longer run. Other longer-term challenges related to aging, slow population growth and tepid productivity gains in the advanced economies (AE), migration and conflict-related refugee flight, and natural disasters from climate change are also weighing on the outlook.

We welcome the emphasis that the Fall 2019 WEO and the Fiscal Monitor (FM) are placing on climate change as a global threat. It is unfortunate that domestic mitigation policies have not garnered the support of some large carbon emitters that have the means and the technology to make a difference. We commend Fund staff for helping members fulfill their commitments under the 2015 Paris Agreement by integrating climate vulnerabilities into surveillance and assisting members to strengthen resilience to climate change. We urge staff to build on the excellent analytical work done two years ago (Fall 2017 WEO) on the macroeconomic implications of climate change, with added emphasis on its impact on vulnerable developing countries (DC) and fragile and small island states.

The retreat from globalization is jeopardizing the prospects for a speedy global income convergence across countries. The income levels of some 1 billion people in emerging and developing countries (EMDC) in Sub-Sahara and the Middle East and North Africa are expected to fall further behind those of AE. Income inequalities across regions and social disparities are also on the rise in some major AE, feeding public support for inward-looking policies and stoking social unrest. Staff's advice to alleviate such inequalities by enhancing human capital and enacting active labor market policies in economically lagging areas, and removing product and labor market distortions, is well thought out (Chapter 2).

Low-income countries (LIC) and many middle-income countries are particularly vulnerable in the current environment of sluggish global growth and rising trade barriers. Most LIC are struggling to meet their development objectives and alleviate poverty under a heavy debt overhang and diminishing concessional flows. For these countries, revenue mobilization and improved spending prioritization along with addressing governance deficiencies are crucial. However, staff studies have shown that despite their best own efforts, the achievement of Sustainable Development Goals (SDG) will be beyond the reach of many LIC in the absence of larger sustained external concessional support. We commend the staff and management's efforts in drawing attention to the challenges faced by LIC in SDG financing, including the Acting Managing Director's outreach in New York last week. Structural reforms also have a critical role to play in boosting growth, as documented in Chapter 3, keeping in mind a key conclusion of a recent staff study that the political viability of reforms crucially hinges on their proper design, prioritization and sequencing, while considering country-specific political economy factors.

Commodity-exporting DC face a subdued outlook for commodity prices partly owing to slowing global demand. Oil-exporting countries, including in our region, continue to face a volatile international oil market where current prices carry a substantial supply risk premium, reflecting in part unilateral US export sanctions on Iran and Venezuela—two key OPEC members—as well as regional conflicts in other oil-producing areas. While diversification away from oil remains a long-term objective for oil exporters, in our region, sound macroeconomic management, taking into account resource constraint and revenue volatility for both oil exporters and oil importers, creating jobs for the educated youth, developing infrastructure, and building financial inclusion and resilience are common key priorities.

Global Financial Stability Report (GFSR)

The prolonged accommodative monetary policy in many AE and EM came at the cost of further buildup of financial vulnerabilities. Against this background, and in a global environment characterized by a weakening of economic activity, the GFSR focuses on rising corporate debt, increased risk-taking by institutional investors, and higher reliance on external borrowing by EM as the key vulnerabilities that could derail growth prospects.

Staff is recommending that policymakers address these specific pockets of vulnerability by reinforcing supervisory and macroprudential oversight of corporate and institutional investors and enhancing disclosure, while at the same time reiterating the importance of following prudent sovereign debt management practices. We broadly agree with these sensible recommendations and with the importance of tailoring macroeconomic and macroprudential policy response to each country's circumstances. Full implementation of the global regulatory reform agenda, without any rollback of regulatory standards, also remains a priority for the membership.

We note, however, from Table 1.1 that many countries with systemically important financial sectors lack the necessary macroprudential tools. While we join staff in encouraging these countries to develop such tools, we welcome staff elaboration on how coordination between bilateral and multilateral surveillance is being conducted to report on the progress, or lack thereof, in the implementation of staff recommendations.

We continue to follow with great interest the implementation by staff of the new Monitoring Framework for Global Financial Stability (MFGFS) to detect emerging vulnerabilities and we consider that the details provided in the referred SDN will contribute to higher transparency and improved communication. One of the benefits of such a framework is to assess how vulnerabilities evolve across countries and over time, and therefore it is important to ensure comparability over the GFSR cycle. In this regard, we note that the number of systemically important economies facing vulnerabilities in the insurance sector was revised upward retroactively for the April 2019 GFSR and their related risk raised from "moderate" to "elevated". Could staff confirm our understanding that this increase is the result of the addition of four new indicators? Relatedly, does this suggest that more coverage, by adding new indicators, may help to uncover other vulnerabilities?

Staff details in Box 1.3 the challenges associated with the transition from interbank offered rates (IBOR) to alternative risk-free reference rates, noting that, while some progress has been made, the adoption of new benchmarks has been limited and market participants continue to issue new products based on IBOR. While we take note of the concerns raised by staff about this slow transition and its potential impact on global financial stability, it is not clear to us what kind of leverage the Fund has since this process is being driven by market participants. Staff elaboration is welcome.

Fiscal Monitor (FM)

Climate change threatens our planet and the world economy. Meeting the goals of containing global warming requires rapid transitions to low-emission economies. Countries should continue implementing their Nationally Determined Contributions (NDC) under the 2015 Paris Agreement, make their mitigation pledges more ambitious in 2020, and work toward establishment of mechanisms to boost action at the global level. More aggressive climate mitigation in many DC has been made contingent on external financial and technical support. This places a premium on AE to honor their commitments under the Paris Agreement to mobilize, from 2020 onwards, $100 billion a year from public and private sources for climate projects in DC.

Various fiscal tools and regulatory policies are being used by policymakers to encourage firms and households to reduce CO_2 emissions. We agree that while carbon taxes, and to a lesser extent emission trading systems (ETS), appear to be the most efficient ways of reducing emissions, mitigation through other methods, including a more aggressive implementation of revenue-neutral feebates and regulations, could be a viable alternative option. Combining regulations with pricing mechanisms is said to increase flexibility for households and firms to find least-cost mitigation options. Could staff indicate if this approach has been adopted in any member country and yielded positive outcomes?

An international carbon price floor, with AE subject to a likely higher floor price, can help scale up mitigation efforts beyond what is currently pledged. To enable the same reduction in global emissions to be met at a smaller global cost, large emitting countries could coordinate price floors by transferring mitigation outcomes (ITMOs) across national governments, as foreseen in the Paris Agreement.

Given higher energy prices associated with carbon taxation and ETS, a comprehensive, equitable, and well-designed strategy is required to make them socially and politically feasible. The revenues generated through the new strategy could be used to replenish general funds, lower distortionary taxes, finance environmental investments, pay for social and infrastructure outlays, and increase transfer payments to the vulnerable.

Demand-side energy efficiency measures should be complemented by supply-side investment in low-carbon technology to lower emissions and contain climate change to manageable levels. Transition to the cleaner energy systems calls for increased government funding of R&D in renewables, public infrastructure investment, targeted fiscal incentives and regulations, price liberalization and land reforms, developing green financial markets and instruments, and avoiding policy inconsistencies and redundancies. We see merit in greater role for environmental, social, and governance (ESG) considerations in stock market indices, financial portfolios, and corporate accounting standards to help reduce the bias against long-term financing of uncertain mitigation investments, and welcome efforts aimed at further developing the relevant transparent standards and disclosures.

Mr. Saraiva, Mr. Fuentes, Ms. Mohammed, Ms. Florestal and Ms. Hennings submitted the following statement:

We thank staff for the comprehensive and insightful flagship reports and very good analytical work. We broadly share staff's assessment of the global economic outlook, associated risks and the main policy priorities. The challenges presented by the current broad-based global economic slowdown and the wide range of downside risks call for close monitoring by the IMF and for decisive action by policymakers round the world.

World Economic Outlook

Global growth is now expected to slow to 3.0 percent in 2019, its lowest level in a decade, before returning to 3.4 in 2020. The outlook remains contingent on precarious assumptions and subject to prominent downside risks, such as geopolitical frictions, policy uncertainties, a no-deal Brexit and a further deepening of the US-China trade dispute. Indeed, risks have become more pronounced than they were in April, and baseline growth projections in most major advanced and emerging economies have been revised downwards. Could staff elaborate on how it assesses the risks of a global recession taking place in the next few years and what could be the potential triggers?

Trade tensions continue to fuel uncertainty and dampen investment. The disputes between US and China on trade and technology continue to send shockwaves to global value chains. The escalating trade tensions have adversely affected business confidence and financial market sentiments. In addition, the notable slowdown in industrial production against the backdrop of weaker external demand composes a challenging global scenario. The sharp slowdown in trade growth is already exerting a drag on the global economy. Going forward, tensions related to technology could further weigh on trade and economic growth. Accordingly, we agree that closer cooperation to resolve trade disputes and revert distortionary barriers, whilst modernizing the multilateral trading system, is a top priority.

The heightened prospect of a no-deal Brexit remains the major risk for stability and growth in the UK and Europe. A no-deal Brexit would not only disrupt supply chains and have long lasting negative impacts on the UK, but it may lead to further turbulences in global trade and weakened financial conditions. In this regard, we expect best efforts from the EU and the UK to avoid a disruptive outcome. That said, policymakers should safeguard the resilience of the financial system and take the necessary measures to smooth the transition in case of a no-deal Brexit.

Difficult headwinds over the forecast horizon places the global economy at a delicate juncture and calls for unwavering policy support. Actions taken by major central banks have been key to shore up activity and avoid a further slowdown of the global economy. Nevertheless, proper calibration is critical as monetary policy space in some advanced economies is limited and traction may be hampered with rates approaching the lower bound. On the fiscal side, support has been more tentative and could be enhanced, especially where fiscal space exists, and output remains below potential. Moreover, the recent shift to monetary policy accommodation has alleviated debt burden and increased fiscal space, while easing global financial conditions. Such a relatively more benign, albeit unstable, environment gives no reason for complacency, as vulnerabilities continue to rise. Where warranted, fiscal space needs to be used wisely, with stimulus being targeted to productivity enhancing investments, thereby contributing to debt sustainability over time.

The slowdown in activity across emerging market and developing economies (EMDEs) has been more noticeable, with a few key EMDEs facing macroeconomic and financial strain. EMDEs' growth is anticipated to rebound in 2020, becoming the primary driver of the expected global growth pick up. Nevertheless, several developing economies remain vulnerable to downside risks. Accordingly, the materialization of risks could jeopardize the expected outturn. For that reason, it is particularly important that EMDEs respond to the current global challenges by implementing productivity enhancing structural reforms. In the case of Brazil, growth is expected to rebound in 2020, propelled by a bold reform agenda that includes a major pension reform, trade liberalization, privatization and improvements in the business environment. Furthermore, an accommodative monetary policy stance, with well anchored inflation expectations will continue to provide stimulus.

The experience of EMDEs with structural reforms underscores the importance of strengthening governance, accounting for country circumstances, internalizing political-economy considerations, as well as timing and sequencing. The initial conditions beyond the narrow focus of specific reform initiatives, such as degree of informality and governance strength, must be properly accounted for when designing a reform program. One of the main conclusions of staff empirical analysis is that "getting reform packaging, sequencing, and prioritizing right will […] be key to maximizing payoffs". In terms of sequencing, the study implies that some reforms could yield non-negligible costs if the timing is not right. Based on recent experience, are there lessons to be learned for resequencing ongoing reforms, when the initial timing and conditions were not appropriate?

Global Financial Stability Report

Normalization of monetary conditions, even if well communicated, has proven to be a more complex process than anticipated by some. Reactions in the last quarters indicated that the financial markets have not fully recovered from the post-GFC developments. More recently, the weakening of economic activity, particularly notable in some systemically important jurisdictions, and the heightened uncertainty affecting market sentiment led monetary authorities to take a step back in the normalization process. Such a move has been effective in easing financial conditions and reassuring market sentiment.

However, the long period of low interest rates bred vulnerabilities in both the financial and non-financial sectors. These vulnerabilities, which could be amplified by the additional monetary stimulus, should be carefully identified and monitored, and corrective measures should be taken in a timely manner. We welcome staff's analysis and agree that policymakers should remain watchful of the financial stability risks the current juncture entails. Accordingly, policymakers must be prepared to act preemptively as vulnerabilities mount and react promptly if risks materialize. We also appreciate the sections in the report with concrete policy recommendations, nonetheless we caution that policy action has necessarily to take account of the specific features of each jurisdiction.

As conventional monetary policy approaches its limits and runs the risk of losing efficiency, alternative policies are again to be considered. While quantitative easing (QE) measures have helped ensure financial stability under the extreme conditions of deflationary pressures and entrenched low-inflation expectations, it is not clear how effective a new round of QE in key jurisdictions would be to provide traction to activity. Could staff comment on the ongoing debates about the appropriateness of resuming aggressive QE policies, either in the current scenario or in case risks materialize? As part of the tested, albeit evolving toolkit, well-targeted macroprudential measures could tackle rising vulnerabilities in specific economic sectors with undesirable or risky behavior. In any case, even accounting for the restrictions posed by the proximity with the effective lower bound, there are improvements to be considered in central bank communication and transactions with banks and non-banks. Staff comments are welcome.

In an increasingly interconnected global financial environment, foreign currency lending and reliance on short-term and volatile funding are examples of shock transmission channels that should be managed with both domestic measures and international cooperation. We appreciate the analytical chapter on non-US global banks and the possible US dollar funding fragility they could face. Monitoring these vulnerabilities is utterly important and we endorse the call for more reflection on improvements that could be made in the international financial safety net structure, on top of solid domestic supervision and regulation. Post-crisis regulatory reforms should not be rolled back, even if some finetuning is warranted for those measures that may have had material unintended consequences.

We appreciate the continued publication of the annexes to the chapters presenting models and data. They are very helpful and will contribute to the transparency and good communication of the analyses. Additionally, they provide the tool for readers that are interested in replicating the analysis for their own countries. We would appreciate it if staff could inform whether the dataset used in the analyses will be made available and if the comprehensive firm-level database for systemically important economies will be updated on a continuous basis. Furthermore, we would appreciate to know whether the new methodologies and models proposed would be included in the capacity development packages.

The integration of environmental, social and governance (ESG) principles into business decisions and investment strategies should be encouraged. In this context we very much appreciated the analytical chapter about sustainable finance. The dissemination of the taxonomy, potential impacts on financial performance and economic development is very important for the development of this market. Liquidity in the secondary market is still a challenge, compounding other constraints, such as limited investment opportunities and high cost of fees, which need to be dealt with for the market to be mainstreamed.

Fiscal Monitor

We welcome the focus of the Fiscal Monitor on the role of fiscal policy as a strategic instrument to curb carbon emissions and foster a transition towards cleaner energy sources. Currently, most economic activities that release greenhouse gases into the atmosphere are not subject to any limit, costs or penalties for contributing to raising global temperatures. Therefore, the use of carbon taxes as a tool to internalize negative externalities generated by the consumption of fossil fuels is appropriate, considering its relatively low economic efficiency cost and revenue generation capacity. Moreover, since the signing of the Paris Agreement (PA), carbon pricing initiatives have gain momentum as a key component for national climate mitigation strategies. Yet, recent research has suggested that carbon taxes alone might be insufficient to galvanize actions towards the removal of carbon dioxide from the atmosphere to achieve the PA targets. In this case, could staff elaborate further on the potential fiscal policy implications of implementing carbon removal strategies?

Despite its efficacy for climate change mitigation, implementing carbon taxes requires a thorough consideration of the country's economic and environmental context, as well as the differences across countries regarding carbon emissions and adaptation efforts. For instance, the Latin American and Caribbean (LAC) region, encompassing a wide range of countries with very diverse geographic, socioeconomic, and institutional profiles, account for a small fraction of global emissions but it is highly vulnerable to climate change. Furthermore, the successful application of any form of environmental taxation scheme across the region must overcome significant externalities to protect economic competitiveness and compensate the penalized sectors. Within individual economies, a carbon tax could have a negative distributional impact since low-income households tend to consume a more energy-intensive basket. Therefore, using carbon revenue to increase social protection and compensate workers in affected industries is critical to soften its regressive impact and reduce political opposition.

While environmental actions by individual countries are steps in the right direction, no nation on its own can confront a global externality such as climate change. Thus, climate action needs international cooperation to coordinate commitments and eliminate free-riding incentives in order to achieve the speed and scale necessary to meet the PA targets. Particularly for low income countries and fragile states, international cooperation is a critical enabler to make the transition to cleaner energy financially feasible. A missing piece in the analysis relates to the scale of international transfer of funds that would be warranted – given the contribution of each country to the stock of carbon in the atmosphere – and necessary to facilitate adaptation and mitigation in other countries that have a small historical contribution and high developmental needs. Can staff comment on international cooperation mechanisms that could be boosted by carbon tax initiatives?

Mr. Rosen, Ms. Pollard, Ms. Crane, Mr. Grohovsky and Mr. Shenai submitted the following statement:

> We thank staff for the extensive analysis across all three sets of documents and welcome this opportunity to discuss the global economic and financial outlook, risks and recommended policy responses. Given the importance of these flagship documents, we urge management and staff to provide all chapters to the Board at least two weeks prior to the Board meeting.
>
> While economic prospects have clearly become more subdued, we see not only downside but also upside risks in the global outlook, and would stress that country authorities are not devoid of policy tools or policy space. Overall, we find the tone of the WEO and GFSR to be more balanced and well-supported by evidence than the Global Policy Agenda (GPA), and thus we recommend a recalibration of the GPA accordingly. The key message of a subdued (rather than "precarious") outlook requiring robust policy action needs to come through more clearly in the GPA. Indeed, the GPA invokes the image of Chicken Little telling us that "the sky is falling," whereas the flagship documents call to mind the words of Kofi Annan, "we have the means and the capacity to deal with our problems, if only we can find the political will."
>
> As a general point, we think the papers would benefit from stronger coherence between the bottom line of the WEO and the GFSR, with more attention to the integration of policies. While the GFSR is generally strong in its assessment of financial stability risks, it puts too much emphasis on macroprudential policy tools that are unavailable or untested throughout a full financial cycle. The WEO, in contrast, while acknowledging the potential buildup of financial vulnerabilities from prolonged monetary accommodation still sees accommodation as appropriate, particularly in advanced economies with subdued growth and muted inflationary pressures. Fiscal policy is viewed more as a secondary policy, to be used when room for further monetary policy is easing is limited. We would like to see a more holistic policy package with prudential oversight of individual institutions and fiscal tools taking up more of the policy burden. IMF staff's work on an Integrated Policy Framework, from the outset, should incorporate fiscal policy as part of the mix.
>
> We are confounded by the lack of a chapter in the Fiscal Monitor analyzing the fiscal outlook and risks. We had to rely on the GFSR to find a discussion of debt issues. The Fiscal Monitor is as deserving of an overview chapter as the WEO and GFSR.

World Economic Outlook

At the current juncture, countries with a weaker outlook need to adopt more supportive macroeconomic policies – particularly fiscal policy – alongside well-calibrated structural reforms to reignite strong growth. We believe subdued domestic demand in major economies – most notably China, Germany and elsewhere in Europe – is an important factor behind the slowdown. This calls for renewed policy focus on addressing longstanding macroeconomic imbalances to durably strengthen domestically-driven growth. We welcome the analysis in Box 1.4 noting that potential output may be higher and output gaps larger than currently estimated and we call for further development of this analysis to draw out policy implications. The unprecedented low interest rate environment also provides room for countries to use fiscal stimulus to offset persistent headwinds. We see considerable scope to support growth by reducing the burden of taxation in many major economies. We also emphasize the need to pursue productivity-enhancing reforms in order to raise medium-term prospects.

There are several areas that should have been given greater emphasis in the WEO: on the upside, the potential for trade actions to resolve in a globally beneficial manner; and, on the downside, a more thorough reflection of broader implications from Brexit and from China's financial sector risks. Furthermore, the WEO focuses on the impact of recent trade actions, without acknowledging the longstanding trade barriers and problematic trade policies that have led to this situation. The United States will continue in its efforts to address restrictive trade practices around the world that are impeding stronger and more balanced U.S. and global growth. To achieve a balanced and fair trading system, we must address the significant imbalances in global trade that stem in part from unfair trade policies and high trade barriers.

United States. The U.S. economy continues to perform strongly and is a bright spot in the overall global outlook. U.S. economic growth is solid, with unemployment near historic lows, solid job growth, labor force participation at a five-year high, the poverty rate falling, inflation close to target and productivity growth strong. The budget deficit remains elevated at 4.7 percent, but under Administration budget proposals the deficit will gradually decline and the recent two-year federal budget deal reduces fiscal uncertainty.

Europe. We agree with staff that fiscal policy can play a more active role, especially where the room to ease monetary policy is limited, and find this advice particularly apt for Germany and other parts of Europe. The narrowing of sovereign spreads for the peripheral euro-area countries, particularly Italy but also others, provides some (albeit limited) fiscal space even in these countries.

Japan. We share staff's assessment that the gradual increase in the consumption tax rate is an important policy tool to address long-term debt sustainability in Japan, and are encouraged that the October 2019 increase in the consumption tax rate is accompanied by temporary fiscal offsets to cushion the near-term impact on aggregate demand. However, given the unexpectedly large impact on consumption and relatively ineffective fiscal offsets of past consumption tax increases, the Japanese authorities should stand ready to do more if necessary. Japan should also build upon its recent economic momentum to enact bolder structural reforms to boost long-term potential growth. This includes policies to encourage more innovation, expand labor force participation and address labor market duality. Policies to further boost female labor force participation and the quality of jobs for female and elderly workers deserved some attention.

China. We agree on the importance of reforms to improve the quality of growth and encourage the authorities to continue efforts to reduce China's reliance on investment and increase the role of private consumption. China's deleveraging campaign was a much-needed response to growing financial sector risks, but as illustrated in box 1.1 in the GFSR, these remain significant challenges that require ongoing attention to reduce vulnerabilities, including by improving the bank resolution regime and scaling back widespread implicit guarantees. To strengthen long-term growth prospects, China should take decisive steps to further rebalance its economy and allow for greater market openness and competition both internally and externally. This includes reducing trade barriers, undertaking structural reforms to reduce the extent of state intervention in the economy and enacting targeted, on-budget fiscal expenditures to strengthen household consumption.

Emerging and Developing Economies. We broadly agree with the outlook for emerging market economies, which depends heavily on a projected pickup in underperforming economies in Latin America and elsewhere. However, we would have welcomed more of a discussion of the factors that are expected to lead to this pickup, particularly in Mexico, where some of the principal reasons cited for the slowdown (i.e. policy uncertainty, weakening confidence) are likely to persist for some time. On Turkey, we would note that credit spreads have decompressed, but are around the same level as they were in April. We encourage low income countries to persist in their efforts to boost domestic revenues through base-broadening, strengthen debt management and improve the quality of public investment to support sustainable, private-sector led growth.

Regional Disparities. Understanding regional economic disparities and potential policy responses to bolster lagging regions is an important topic. We were surprised by the finding that trade shocks have no significant effect on reginal labor market performances and within-country regional disparities as this is at odds with much other research. We encourage staff to consider heterogeneity in sectoral specialization (e.g. services vs. manufacturing) across regions as well as expanding the measures of trade shocks. Regardless of whether disproportionate impacts on lagging regions come just from technology or a combination of technology and trade shocks, the policy focus on investing in human capital remains relevant. We concur with staff on the importance of training and active labor market policies. Reducing labor and product market distortions can also help lagging regions become more resilient, though careful sequencing is needed. We note that recent research from the Federal Reserve indicates that reducing the level of employment protection may be detrimental when product market regulation is high and wages are rigid. We appreciate that staff recognizes the drawbacks of using regional per capita GDP to underpin their analysis, as noted in Box 2.1. Particular caution is required with resource-intensive regions.

Structural Reforms. Productivity-enhancing reforms are key to raising medium-term growth prospects and we encourage staff to extend and deepen its initial work on structural reforms presented in Chapter 3. We support the message that countries should take advantage of benign economic conditions and post-election honeymoon periods to push forward with structural reforms to enhance potential growth. The findings on how improvements in governance and access to credit can amplify the impact of other structural measures underscores the centrality of these particular reforms. Can staff comment on whether the dataset could be further developed to better capture the design and intensity of structural reforms, through more granular data and/or by complementing the data with case studies to better capture context and reform specifics. For this work to have greater relevance, we encourage staff to further examine country experience regarding the pace, sequencing and design of successful structural reforms carried out in challenging economic conditions, such as those facing countries seeking IMF programs.

Global Financial Stability Report

We welcome the GFSR’s focus on salient risks, framing the familiar and growing risks to financial stability in the current lower-for-longer environment. We broadly agree with the assessment of financial conditions and the outlook. In particular, we support the focus on the growing stock of corporate debt, which we view as an important risk to be monitored, as well as increased liquidity risks for insurers and pension funds which could amplify the effects of the next downturn by limiting their ability to act countercyclically.

We also strongly support the analysis on risks posed by international banks' dollar funding. During the global financial crisis, foreign banks' dollar intermediation businesses exposed them to significant liquidity pressures as wholesale markets rapidly dried up. As staff note, these vulnerabilities have grown in aggregate, although have shifted in geography. It is important that authorities monitor these risks closely. We firmly echo staff's call that strong bank health can help mitigate the risks and encourage supervisors to ensure banks are on a sound footing.

We further welcome the focus on rising debt in emerging and frontier markets, although this chapter seems better suited for the Fiscal Monitor. In particular, we welcome the chapter's emphasis on overindebted state-owned enterprises, implicit guarantees, and contingent liabilities. We echo the policy recommendations on this front, including improving SOE governance and business plans; strengthening debt statistics and reporting; and creditor adoption of sustainable lending rules. We encourage future Fiscal Monitors to take up this topic.

Finally, we found chapter 6 on ESG investing to be more naturally suited for an investment management periodical than the GFSR. While ESG concerns are an important development in the investment world, the research on the potential links between financial stability and ESG issues is nascent, and the chapter ignored the significant research on fiduciary responsibilities and maximizing shareholder value in investment decisions. The chapter also focuses more on investment considerations rather than on financial stability risks. We disagree that central banks, whose mandates are frequently centered on price stability and employment, should involve themselves in this work as opposed to other government agencies that may have mandates and tools more directly applicable to addressing environmental concerns. Finally, while ostensibly focused on ESG issues, the chapter overwhelmingly focused on climate change at the expense of the broader ESG universe, including governance. The chapter notes that governance failures contributed to the global financial crisis, but then ignored these issues almost entirely. We discourage further work on this topic without a better identification of clear financial stability risks, but if future work takes place it should at least include key governance issues.

Fiscal Monitor

While we continue to support the IMF providing fiscal policy advice to members to address vulnerabilities to extreme weather events where they are macro-critical, we also stress that the Fiscal Monitor would best serve its membership by providing technical analysis in core areas of IMF expertise. With regards to the climate work, in our view, small states vulnerable to large natural disasters merit particular attention. As the Fiscal Monitor makes clear, climate commitments continue to be nationally-determined. The IMF's role should be focused on advising countries that seek input on fiscal questions such as on carbon taxation, and staff should also be ready to provide advice on how countries can achieve stronger growth by promoting the efficient development of cost-effective energy sources. Coordination with multilateral development banks and international organizations is critical to avoid duplication of effort.

Mr. Merk, Mr. Braeuer, Mr. Fragin and Ms. Lucas submitted the following statement:

We thank staff for their well-written and informative sets of reports. We share staff's appraisal in the World Economic Outlook of a sharp slowdown in global economic growth during the last three quarters of 2018 and a stabilization in the current year. With regard to its growth projections, we view staff's baseline as somewhat optimistic. Risks at the current juncture are elevated, and vigilance is key.

Economic growth will likely remain subdued in many jurisdictions, placing a premium on frontloaded and decisive structural reforms to bolster potential growth. We second staff's call to prioritize actions to strengthen resilience across all economies. Securing adequate fiscal, financial, and reserve buffers as well as reducing still elevated debt levels and financial vulnerabilities remain of the essence to sustain stability, unlock confidence and guard against external shocks.

We agree with staff's assessment that the balance of risks is tilted to the downside. From our perspective, a potential further escalation of trade tensions, ongoing political uncertainty and the corresponding lack of confidence represent pressing risks to the global economy. Uncertainty around the future regulatory system complicates firms' investment planning, and as staff rightly points out, protectionist tensions threaten to harm productivity growth by disrupting global supply chains and impeding technology dissemination. Therefore, staff's call to avoid further policy missteps, resolve trade disputes cooperatively and revoke unsuitable and mutually harmful tariff and non-tariff barriers to trade quickly appears of critical relevance.

We welcome staff's discussion in the Global Financial Stability Report of mounting financial vulnerabilities in the face of low interest rates and unconventional monetary policies. In the current environment, it seems all the more important to complete and preserve hard-won regulatory and supervisory advances and proactively work against a further buildup of financial risks, including through suitable macroprudential policies.

The analysis of climate-change related policies in the Fiscal Monitor is highly appreciated. We agree with staff that an internationally coordinated approach to combat climate change is urgently needed.

World Economic Outlook

Weakening investment activity represents a prime factor behind the slowdown in manufacturing, trade, and, ultimately, global economic growth. Confidence effects of trade tensions and political uncertainty appear to have played a role in this regard. At the same time, manufacturing activity and trade are also influenced significantly by pronounced global investment cycles. In this light, the current deceleration can at least partly be seen as normalization from previously elevated levels. Apart from manmade economic threats associated to populist and protectionist policies, does staff see any further - potentially structural - differences compared to past investment cycles like those in 2011/12 or 2015/2016? Activity in services has proven quite resilient so far, as also indicated by the respective global purchasing managers' index. However, historically, there appears to be a high degree of synchronization (with a slight delay) with the respective index for manufacturing. Against this background, how does staff assess the likelihood for a more pronounced dampening of activity also in services?

Staff Projections

From a broader perspective, staff's projections appear to be somewhat optimistic. So far, we do not see compelling signs for the expected pick-up of global growth in the remainder of 2019. We would thus be interested in staff's view on the likelihood of further downward revision of the projections for 2019 and 2020 going forward. Could staff also comment on the differences between its projection for 2020 compared to the latest OECD forecast?

Staff's GDP growth forecast is also slightly higher than our current assessment (in particular for 2020) with regard to the Euro Area and Germany. As for Germany, we would be more cautious with respect to the expected rather quick recovery in exports, and to a lower extent also regarding the strength of domestic demand growth, given weak indicators especially for manufacturing. The inflation projection for the Euro Area and Germany in 2019 is more or less in line with our own assessment. But, especially for Germany, the projections for 2020 appear quite high, given an expected negative contribution from energy and muted expectations for GDP growth.

Region-specific Policy Recommendations

We take note of staff's recommendations for fiscal policy in the Euro Area. We would like to highlight that German fiscal policy is already quite expansionary. Currently, we see no need for additional cyclical stimulus. However, there are structural shortcomings, which need to be addressed. We agree with the staff that countries with high public debt should concentrate on debt reduction. Only if growth weakened significantly and debt sustainability was not jeopardised, the consolidation path could be temporarily adjusted. On staff's recommendation of a synchronised fiscal policy response, we would like to point out that fiscal spill overs in the Euro Area are rather low according to our assessment.

Staff expects current account imbalances to shrink in the medium term, and international investment positions relative to GDP to stabilize over the next years. We generally agree with the identified policy priorities that focus on the consolidation of public debt in countries with excessive current account deficits. We encourage surplus countries to promote structural measures to foster investment and potential growth. In this regard, potential fiscal policies in Germany should be justified on their own account and should not primarily be targeted at reducing an existing current account surplus.

The United States and the rest of the world would benefit from a more stability-oriented approach towards fiscal policies. The US economy continues to perform rather robustly, with relatively solid growth, inflation close to target and very low unemployment. Pro-cyclical fiscal stimuli have played a crucial role in the economic upswing, further raising already high debt levels and adding to global imbalances. Against this backdrop, the shift to a broadly neutral fiscal stance projected for next year would represent an important step. However, as staff rightly points out, considerable fiscal consolidation efforts will be indispensable going forward.

Present headwinds from trade tensions and feeble external demand should not allow the necessary deleveraging and rebalancing in China to be derailed. We welcome staff's call for continued structural transformation, which includes e.g. opening up the economy and strengthening market forces, containing credit growth, bolstering financial regulation and supervision and modernizing policy frameworks. Among other things, this would help to address lingering vulnerabilities associated with high and quickly rising corporate and household debt and a potential adjustment in real estate markets.

We call on the US and Chinese authorities to constructively work towards a quick resolution of trade disputes by contributing to reforming the multilateral and rules-based international trading system.

Subnational regional disparities and adjustment in advanced economies (Chapter 2)

The analysis of lagging regions appears of high policy relevance. In general, we agree with staff's conclusions that national policies aimed at reducing distortions in the labour market and encouraging more flexible and open product markets can facilitate regional adjustment to adverse shocks. We would, however, strongly encourage staff to consider the different labour market policy indicators together and not only isolated. This would reflect the quality of labour market policies more adequately. As the German case illustrates, the concurrence of other instruments, such as flexible working times, may improve labour market outcomes in response to adverse shocks, even in case of more stringent employment protection. Furthermore, the analysis of shock responses would benefit from shedding more light on the transmission mechanism, which explains the role of national policies for obtained labour outcomes. The discussion on the role of labour mobility for regional disparities would also profit from deepening the argument raised in the introduction that increasing specialisation and agglomeration could favour regional core-periphery patterns. In this case, higher labour mobility – and not a lack thereof – may well exacerbate regional disparities.

Global Financial Stability Report

Medium-term risks to global growth and financial stability continue to be skewed to the downside. Easy financial conditions encourage financial risk-taking and may fuel a further build-up of vulnerabilities. Market participants have reassessed the expected monetary policy path pushing the amount of bonds with negative yields to new heights. Other risk assets are also showing signs of stretched valuations. Sovereign debt levels remain problematic in some jurisdictions and low interest rates may have contributed to an increase of debt. Remaining political and geopolitical risks such as a no-deal Brexit, an escalation of trade tensions or a faster-than-expected slowdown in global growth could trigger an abrupt repricing of risks. We also share concerns about vulnerabilities in the banking sector which range from compressed interest margins to the underestimation of credit risks.

We mostly concur with staff's policy recommendations. We strongly support staff's call for the pre-emptive activation of broad-based macroprudential tools in countries where economic conditions are still relatively benign or financial conditions are still loose.

Specific remarks on Global Corporate Sector Vulnerabilities (Chapter 2)

High leverage in the corporate sector can exacerbate the next economic downturn. The outlook for firms has weakened amid easy financial conditions and financial risk-taking and riskiness of lending have increased. High debt-funded dividend pay-outs and share buybacks as well as strong M&A activity of US firms are typical late cycle developments. The leveraged loan market has grown considerably over the last couple of years in both the US and Europe. Strong demand has given rise to a significant deterioration in underwriting standards despite regulatory efforts to set limits on certain risk parameters. Investors who extrapolate relatively benign historical average loss rates may underestimate risks as the credit quality of leveraged loans is lower than in past cycles and so-called add-backs may reflect optimistic views of firms. In our view, it could be more clearly pointed out that banks also remain an important investor group in the leveraged loan market; according to some estimates, banks are still the dominant investor group.

We welcome the assessment of debt-at-risk in an economic downturn and share staff's observation that in economic areas where banks provide a large fraction of corporate loans, banks have significant exposure to corporate risks.

Specific remarks on Institutional Investors (Chapter 3)

Lower-for-longer yields may prompt institutional investors to seek riskier and more illiquid investments to earn their targeted return. This increased risk-taking may lead to a further build-up of vulnerabilities among investment funds, pension funds, and life insurers, with grim implications for financial stability. Increasing portfolio similarity of investment funds heightens the potential of shocks being transmitted throughout the fund sector. For German funds however, we see only slight upward changes in funds' portfolio similarity.

We generally agree with the recommended policy actions to reduce the build-up of vulnerabilities. Credit and liquidity risks in the funds sector require close monitoring and adequate risk management. Minimum eligibility criteria focusing on fixed income assets' credit quality and liquidity might help decrease the level of credit and liquidity risk taken by funds. However, these requirements should not undermine the principles of risk-based regulation. In particular, making funds more constraint and less able to buy or hold risky assets in periods of stress might induce more pro-cyclicality in their response to adverse market developments. Aligning funds' redemption periods with their liquidity profile on the other hand, would be beneficial as it would likely reduce selling pressure on funds in phases of market turmoil. We agree on the importance of frequent and appropriate guidance on stress-testing and appropriate disclosure of potential risks to ensure minimum standards for funds' liquidity risk management and we support the harmonisation of leverage measures to improve data quality and comparability. A globally harmonized minimum solvency standard for insurance companies would help reduce vulnerabilities and the potential for weaknesses in one jurisdiction from spilling over to others through international capital markets.

Specific remarks on Emerging and Frontier Markets (Chapter 4)

We broadly agree with the analysis and policy conclusions on emerging and frontier markets. Policies should aim at containing an excessive build-up of debt, especially in countries with already elevated debt sustainability risks. This should include safeguards to match the debt service profile with investment returns and contingency features for shocks.

Containing debt-related vulnerabilities should be the top priority for frontier markets. The Fund and Bank should support this by vigorously implementing their Joint Multipronged Approach and come to a common understanding on how to deal with the issue of collateralized sovereign debt, in particular in case of Fund financial support. Moreover, creditors - public, including non-Paris Club members, and private - should foster sustainable lending practices and a timely resolution of debt distress.

Specific remarks on Banks' Dollar Funding – Financial Stability Implications (Chapter 5)

We broadly agree with the findings and recommendations in this section. The USD liquidity of the systemically important German banks as measured by the Liquidity Coverage Ratio (LCR) has improved in recent months and exceeded 100 percent. Nevertheless, USD funding appears to be more volatile than total liquidity over all currencies and there is significant variation between institutions. Hence, we fully agree with the recommendations to continue monitoring funding profiles and liquidity in USD.

We agree with staff's assessment that liquidity swap lines can alleviate funding pressures but would like to draw attention to possible moral hazard effects. The analysis focuses on the benefits of swap lines in terms of their stabilizing effects on FX swap markets and cross-border lending. We fully agree that these arrangements have stabilized funding markets and have fostered the flow of credit during periods of market stress. However, there are also potential costs associated with these arrangements. It is not clear what the medium and long-term effects of the swap lines are. It seems possible that financial institutions would tolerate a shortage of USD funding in their funding plans because they expect to access swap lines in an emergency. This could incentivize excessive risk taking in their USD business. We would welcome further discussion of potential costs of swap lines in terms of moral hazard effects.

Specific remarks on the Link between Sustainable Finance and Financial Stability (Chapter 6)

We welcome the report's focus on financial stability risks stemming from sustainability concerns. In principle, all ESG aspects may prove important to firms' ability to navigate ESG-related risks. While we generally agree that additional policy action is needed to incentivize firms to carry out investment and make further changes in their business practices to reduce negative externalities from climate-related risks, we warn against ill-considered policies. High uncertainty caused for example by sudden and unexpected changes in political decision making or unforeseen technological advances makes it very difficult to reliably quantify climate related risks. To decrease uncertainty for investors and thus preserve financial stability, policymakers should plan and stick to a long-term path of adequate policies.

We share staff's call for standardized taxonomy and standardized disclosure rules. ESG issues can have an impact on firms' corporate performance and risk profile, and potentially on the stability of the financial system. In the transition to a greener economy, asset prices might not fully reflect the risks of future sudden devaluations. Closing data gaps will be crucial for investors and issuers to efficiently price externalities, making it easier to see long-term benefits from sustainability. Due to the importance of further data, we welcome staff's plan to conduct additional research and we are looking forward to hearing about the results in the April 2020 GFSR.

Concerning passive sustainable investing strategies, we would favour a more balanced tone. Passive sustainable investing strategies can be a promising way, especially keeping in mind the recent growth in passive investments. In that context, engagement is only one sustainable investment approach and costs need not necessarily be higher.

We agree that regulators and central banks can help develop ESG-related markets by fostering awareness and offering intellectual leadership.

Fiscal Monitor

We agree with staff that an internationally coordinated approach to combat climate change is urgently needed. We thank staff for the analysis of the effects of a carbon price in G20 countries, for taking equity considerations into account and for analyzing ways to improve domestic acceptability of mitigation policies. The German government has recently outlined the cornerstones of a comprehensive Climate Action Programme, spelling out the way towards achieving Germany's ambitious climate targets for 2030.

The Fund has an important contribution to make given the already macro-critical nature of climate change in some member countries, the Fund's universal membership and its macroeconomic and fiscal policy expertise. We look forward to further elaborations by staff on the integration of climate-related work in the context of the Fund's bilateral and multilateral surveillance as well as technical assistance, within the remits of its mandate, while leveraging the work of, and avoiding overlap with other institutions, such as the OECD, the World Bank and relevant UN organizations.

We would welcome a somewhat more nuanced assessment of the specific advantages and disadvantages of carbon taxes and emission trading systems in the report, also considering that many countries in the world have already introduced emission trading systems which have proven to be efficient.

From the German perspective, we do not consider shifting from fossil-based energy to nuclear energy (p. 8) to be an adequate policy option, as it would allow diverting financial resources away from environmentally sustainable activities into technologies that we do not consider sustainable.

Mr. Mozhin, Mr. Palei, Mr. Potapov, Mr. Tolstikov and Mr. Shestakov submitted the following statement:

Global outlook and risks

Global economic activity is weakening, and we are on the verge of another global recession. Besides some one-off factors driving deterioration, such as acute crises in several emerging market economies, the global economic slowdown now resembles a serious and lasting disease. Its fundamental causes are not entirely clear, but some contributing factors are obvious. The calls for cooperative policies or, at the very least, "doing no harm" have not led to a credible response to downside risks to the outlook.

Major challenge to the global economy stems from the escalating disruption of trade. Multilateral trade system is increasingly undermined by unilateral impositions of tariff measures, in contradiction to the WTO rules. These actions are further aggravated by the growing threat to the WTO dispute settlement system. By the end of this year, the international community may find itself without a functioning Appellate Body due to the lack of quorum. While the threat to the WTO settlement system features prominently in the recent update to the Global Risk Assessment Matrix, we did not find it in the updated scenario in Box 2. Staff comments on the likely effects of the WTO paralysis would be useful. Six months ago, the damage from the widening trade wars was in the domain of risk analysis, and today it is already a part of the gloomy baseline scenario. Deepening trade tensions are leading to a widespread restructuring of the global supply chains, which can become yet another persistent medium-term challenge to the global economy.

Over the past three years, the looming threat of Brexit revealed the difficulties for the advanced European economies to come up with cohesive solutions and their orderly implementation. The full magnitude and consequences of the Brexit shock are likely to play out very soon and may push the euro area economy into a new stage of a long-lasting stagnation. However, the Brexit-related crisis also highlighted the extent of challenges for the European Union in other areas, such as completion of the banking and capital markets union, fiscal policy, and migration. The slow and sometimes ineffective decision making has broader repercussions for the ways we see institutions in advanced economies.

The Brexit, trade wars, and worsening economic outlook have already reversed the normalization of monetary policy in the United States and forced the European Central Bank to embark on a new round of monetary easing. However, when the interest rates are close to the lower bound, continuing reliance on monetary policy is not very promising. Extremely low interest rates lead to higher risks to financial stability. Vulnerabilities are growing in the balance sheets of banks, non-bank financial institutions, corporations, and public sectors in many advanced and emerging market economies, as it was once again highlighted in the GFSR. Easy monetary policy in large advanced economies may fuel currency wars and increase volatility of capital flows, threatening stability in EMEs and LICs.

Unilateral actions amidst persistent and emerging economic challenges lead to distrust. They weaken international cooperation not just in the area of trade, exchange rate policies, and volatile capital flows. The EMEs and LICs are bound to face external challenges with still very fragmented and potentially underfunded global financial safety net.

Policy responses

In the current environment the EMEs and LICs may have to rely on self-insurance. Accumulation and prudent use of foreign exchange reserves may have to be supplemented by capital flow management measures -- not necessarily the most effective, but practical approach to deal with sudden stops in capital flows and restricted access to the U.S. dollar liquidity. Many EMEs and LICs lacking appropriate fiscal and foreign exchange buffers may have to conduct procyclical policies.

For the advanced economies the constraints on macroeconomic policy are of a different nature. When monetary policy response is impaired and the structural reforms either take a long time or lack broad support from electorate, fiscal policy should play a more prominent role. Many experts now reassess the costs and benefits of relying on fiscal policy due to persistently low interest rates and, in many cases, flat or even inverted yield curves. Under these circumstances and in the situation of worsening economic outlook, the notion of debt sustainability and fiscal space should be revisited by the Fund more explicitly. It is difficult to expect meaningful additional fiscal measures in the United States and Japan. A possibility of a coordinated fiscal response in the euro area is one of a few remaining options.

For the Asia-Pacific region global challenges are particularly relevant. A lot depends on the resilience of the Chinese economy. China faces not just the need for continuing rebalancing of the economy to domestic growth drivers with less dependence on credit growth. The economy must also adapt to new pressures in international trade and finance. We agree with staff that closely linked international value chains and the patterns of direct investments are likely to be affected. More active regional and international cooperation through various fora could offer ways to lessen the damage from changing external environment. China should also continue gradual opening of its capital account and internationalization of the yuan.

GFSR

We commend staff for their candid and informative assessment of financial stability risks in the GFSR. The tone of the report is appropriately alarming. The risks have substantially increased in the current “lower for longer” environment. While the recent monetary policy easing in major advanced economies has helped to bolster financial market sentiment to some extent, very low and, in many cases, negative interest rates and yields fuel further buildup of financial vulnerabilities. At the current conjuncture, global investors are pushed to search for higher yields, reducing overall credit quality and raising default risks. These developments deepen concerns about the costs and benefits of monetary policy stance going forward.

Staff rightly point out that financial markets may not fully account for escalating trade tensions and uncertainty about the global outlook. Staff’s estimates of widespread misalignments in terms premiums, equity valuations, and corporate bond spreads (Figure 1.2 and Figure 2.2) point to mispricing of risks by market participants. The shift in market expectations of the expected monetary policy path (Figure 1.1, panel 4) creates additional uncertainty by further limiting potential policy space. Under these circumstances, the likelihood of a sudden tightening of financial conditions has increased. Potential shocks, including further escalation of trade tensions and disorderly Brexit, could trigger destabilization in financial markets.

The analysis of corporate sector vulnerabilities once again points to a precarious situation in this market segment. Staff highlighted that debt-at-risk and speculative-grade debt are already elevated in several major advanced economies and in case of a sharper downturn in the global economy can exceed levels observed during the global financial crisis (GFSR Chapter 2). At the same time, the growing share of global bonds with negative yields push institutional investors to seek riskier, more illiquid, and lower-credit-quality investments, including by deepening their exposures to corporate bond markets. Another concern is associated with increasing portfolio similarities and cross-border spillovers (GFSR Chapter 3). Against this background, we broadly welcome staff's recommendations to strengthen transparency and oversight of nonbank financial entities. Addressing risks from highly leveraged firms would also require further efforts in developing respective policy tools.

Given the elevated financial stability risks, we welcome the new analytical tools to better assess the potential fragility of non-U.S. banks in the face of shocks to the U.S. dollar funding sources (GFSR Chapter 5). This framework allows to identify weak points and analyze interactions and channels of shock transmission in the financial systems from changes in the U.S. dollar liquidity conditions. The analysis in this chapter also points to the benefits of maintaining large international reserves by EMEs against the backdrop of still very fragmented global financial safety net (GFSN). Uneven access to funding and the lack of clear rules in many of its parts represent important gaps in the GFSN.

WEO chapters on special topics

In Chapter 3, staff carried out a complex exercise updating and extending the 2008 structural reform dataset, constructing the indicators for five areas of structural reforms. Staff used these indicators to explore interconnections between structural reforms, economic performance, and political costs. These efforts are commendable, as evaluation of progress in structural reforms is a notoriously challenging endeavor. We would welcome the efforts to create indicators based on the Fund's own expertise, which should complement the reliance on various third-party indicators.

Having said that, we believe that, until a formal in-depth discussion of this dataset by the Board, staff should refrain from presenting it as an "IMF dataset", which reflects the views of the institution. As far as we know, the Board discussion is expected only in May of next year. At this stage, the dataset raises several concerns that should be addressed going forward.

Firstly, the content of the dataset and the methodology of its compilation largely remain a black box. The Board has never had a chance to discuss it in detail. Secondly, as far as we understand it, the approach used by staff to measure progress in structural reforms is linked to the degree of liberalization, implying that full unconditional deregulation is an optimal choice. We are concerned that such an approach may be at odds with the substantial and difficult evolution in the Fund's policy views, as it shifted away from the naive interpretation of the Washington Consensus. Staff may wish to elaborate on this issue. We also question the reasons for staff to leave aside structural reforms in advanced economies, where productivity has declined, but progress in structural reforms remains limited. Therefore, we call for a more cautious presentation of the Structural Reform Dataset in the WEO report.

Another concern about Chapter 3 is related to staff's approach to assess governance. This part is based on the Worldwide Governance Indicators (WGIs), which staff incorrectly attributed to the World Bank. More importantly, it is not in line with the Fund's recently adopted Framework for Enhanced Fund Engagement, which calls for using reliable sources of information, including a body of knowledge derived from the Fund's own activities. Thus, the Fund has country-specific information on progress in governance from the Fiscal Transparency Evaluation, the Public Investment Management Assessment (PIMA), C-efficiency estimates, AML/CFT etc. Why do we need to limit the analysis and rely on inferior perception-based indicators, such as the WGI, when the Fund itself has more substantive and more reliable information? As staff also highlighted in footnote 6, page 8 of the chapter, the WGIs are not comparable across different time periods, so it is not clear to us how they can be used in the analysis based on time series. Another important deficiency of the WGIs is that they show virtually no meaningful changes over a very long period, as staff noted in the text. The overall statement about the lack of progress in governance in the EMEs and LICs, in our opinion, is not supported by evidence and has to be reconsidered by staff.

According to Chapter 2, increasing regional disparities in economic activity in advanced economies create risks of social trust erosion and political polarization. We commend staff's research on this issue and welcome further exploration of the driving forces behind diverging regional labor market conditions.

Staff note the increased competition in markets that is associated with the rise of China's productivity. Surprisingly this do not have a significant average effect on regional unemployment in advanced economies, which raises the question of the exact mechanism of this resilience. One possibility is that trade realignments dampen overall productivity in the lagging regions, since they operate at the level of comparative advantage that works against lagging regions on the subnational level. This interpretation is supported by the significant effect of the technological shock, which works as if capital stock became increased, and the latter by the standard economic logic should increase production of capital-intensive goods, which geographically is situated in economically pulling away regions.

Fiscal Monitor

Damaging effects of global warming affect people everywhere and include rising sea levels, coastal flooding, and more frequent extreme weather events like tropical hurricanes. The long-term goal of the 2015 Paris Agreement is to limit the projected global warming to 2°C, which requires ambitious reduction of greenhouse emissions to a third of baseline levels by 2030 and is compatible with a carbon tax of $75 per ton. Carbon pricing taxation provides the most economically efficient way to reduce carbon emissions by incentivizing firms and households to internalize full social marginal costs of emissions into their decision making. While the current global average carbon price is $2 per ton, which is a tiny fraction of $75 per ton, even $25 per ton carbon tax could yield substantial emissions reductions (Figure 1.2) and might be promoted as a provisional measure.

The international toolkit for fighting climate change should not be limited to taxation and might be expanded with additional measures, with most promising ones being global carbon price floor and emission trading system. Different floors for advanced and emerging G20 economies will ensure fairness in the distribution of the shared burden of fighting climate change across countries.

Carbon dioxide taxation has a potential of producing a double dividend of improving the environment and stimulating the economic activity while addressing the problem of inequality. The latter may happen if carbon taxation revenue leads to reduction in capital and labor taxation or is used to increase public investments and/or social transfers. The transfers should target communities experiencing substantial job losses. There might also be additional compensatory transfers for disproportionally affected firms.

Chapter 6 in the GFSR complements the analysis in the Fiscal Monitor. Climate change presents a new set of risks to financial stability, from reduced trust between firms and stakeholders to firm-level tail risks from carbon dioxide emissions. Besides physical climate change risks the important group of risks is associated with the transition towards the more carbon efficient production. These transition risks loom large to the firms, because the forthcoming regulatory changes may increase the costs of delayed action and noncompliance. The integration of environmental, social, and governance (ESG) factors into firms' business models may help mitigate these risks. The development of sustainable finance is welcome, but ESG investment vocabulary needs to be standardized, so investors could better understand what is behind E, S, and G. Clearer ESG factor taxonomy will provide better objectives to asset managers.

Mr. Mouminah and Mr. Alkhareif submitted the following statement:

We thank staff for the comprehensive set of flagship reports and analytical work. We broadly share staff's assessment about the global economic and financial developments and the outlook. We would like to offer the following comments.

World Economic Outlook

We broadly share staff's assessment of the global outlook and risks. We note that the pace of global economic activity remains weak and the outlook is precarious with large downside risks. The projected growth of 3 percent in 2019 is the lowest since 2008-09. Risks to the outlook remain significant given rising trade and geopolitical tensions as well as the continued buildup of financial vulnerabilities. Against this backdrop, we support staff's call to decisively aim at defusing trade tensions, reinvigorating multilateral cooperation, and providing timely support to economic activity where needed. In addition, addressing financial vulnerabilities is a priority to strengthen resilience. The key development challenge is how to boost inclusive growth by providing opportunities for all so that the benefits are shared widely. In this context, we underscore the crucial importance of ensuring adequate social spending and robust social safety net. We therefore support staff's view that making growth more inclusive and avoiding protracted downturns, which disproportionately affect the most vulnerable segments of population, are essential for securing better economic prospects for all.

We cannot overemphasize the importance of addressing geopolitical risks, including ensuring the safety of free trade passages, to safeguard the global oil supply and we urge the international community to take strong action. In this connection, we bring attention to the September 14 attack in Saudi Arabia to interrupt the global oil supply and thereby undermine the stability of the global economy. In fact, incidents against vessels in the Arabian Gulf and pipeline in Saudi Arabia also took place earlier to interrupt the global oil-supply chain. In this connection, the swift response and resilience demonstrated by Saudi Arabia shows the preparedness to deal with threats aimed at sabotaging supply of energy to the world. To safeguard the stability of the global economy, we urge strong action by the international community to ensure uninterrupted supply of energy.

We reaffirm our long-standing support to strengthen global trade and investment for the benefit of all. Energy in general and oil & gas in particular are important for the global economy. However, the lack of inclusive flow of investments, due to restrictions and discrimination among energy resources, remains a concern. In our view, unconditional flow of investments to all sources of energy and related technologies are key to ensuring global energy security and sustainable economic growth. To this end, the Fund's analysis should take into consideration the need to strengthen infrastructure investments, including in the energy sector.

Proactive policies are needed to ensure a strong global economy. The global environment is characterized by relatively limited macroeconomic policy space to combat downturns. In particular, the prolonged period of low interest rates and unconventional monetary policies has dampened the capacity of central banks to reinvigorate global growth. In this context, we share staff's conclusion that fiscal policy can play a more active role in supporting global growth. Staff rightly note that very low interest rates (or in some cases negative levels) can reduce the cost of debt service. Here, we encourage the Fund to provide deeper assessment of the available policy space that can be used in any economic downturn. Have staff calibrated the additional fiscal space created from the ultra-accommodative monetary policy, particularly given that about $14 trillion of the current bonds offer negative yields?

We support staff's view that countries need to resolve trade disagreements cooperatively. In this connection, we are discouraged to note that the WTO today cut its forecast for growth in global trade this year by more than half. Against this background, it is essential that the Fund should continue its efforts to promote open trade through advocacy, policy advice, and analyses, in collaboration with the WTO and other international organizations. Specifically, we endorse the continued call to resolve trade tensions and modernize the rules-based multilateral trading system. Experience has shown that pursuing global cooperation and maintaining an open and fair-trading system benefits all countries. Here, we take note of the work in Scenario Box 2 and wonder if staff can add the impact on commodity exporters and LICs in future WEO analyses. Staff comments are welcome.

At the multilateral level, international taxation is a key area for greater cooperation. We believe that the Fund has an important role through its contributions to analytical work and capacity building, especially for LICs. We also encourage the Fund to keep its focus on promoting global cooperation in this area. In particular, continued close collaboration with the OECD and other international organizations is essential to ensure complementarity and avoid duplication of the work.

We welcome the detailed analysis in Chapter 3 on the macroeconomic effects of structural reforms in EMDEs. We agree with staff on the need for careful design and prioritization of reforms, supported by strong ownership and good communication. Indeed, we encourage staff to take into account the political reality on the ground when designing Fund programs. Box 3.1 offers interesting insights about the political effects of structural reforms. We note the finding that reforms are best implemented when economies are performing well. When countries are facing unfavorable economic conditions and approach the Fund for a program, we wonder how staff would reflect upon these findings in the design of the program? We note that the database in this chapter is up to 2014. Hence, the analysis does not fully capture the impact of structural reforms in later years, especially the wide-ranging reforms undertaken by many countries in the MENA region since 2016. We therefore see merit in updating the database to reflect the recent reforms by many counties.

We would like to highlight the following specific comments on the WEO report:

We note that the migration subject has been merged with climate change (page 33). We are of the view that the issues pertaining to migration deserve particular attention from the Fund. We also see the need to step up the Fund’s focus on fragile and conflict-affected states, including refugee flight from conflict areas.

We welcome the analysis in Box 1.1 on the recent developments in the global automobile industry. According to staff, the industry’s downturn contributed significantly to the slowdown in global trade and growth. Can staff provide the breakdown of the growth impact from different supply and demand factors, including from the rollout of new emission tests?

In Box 1.4, the implications of the so call "plucking theory" need to be properly addressed by the Fund, particularly as current estimation techniques may significantly underestimate potential output and affect the quality of Fund surveillance and programs. We therefore concur with staff that more research is warranted to enhance measurement of potential output. Here, we invite staff to provide more clarification of the planned Fund work to advance technical capabilities to accurately estimate potential output.

Global Financial Stability Report

We welcome the comprehensive analysis of global financial vulnerabilities, underlining the need for decisive policy actions. We take note that financial conditions have eased further since the last report and have helped in mitigating near-term downside risks to global growth. At the same time, the continued easing has fueled a further buildup of financial vulnerabilities, including through encouraging further financial risk-taking. Therefore, we broadly support staff's policy recommendations to address the rising financial vulnerabilities to mitigate medium-term risks to global growth and financial stability. In particular, we agree that policymakers should tighten macroprudential policies, as needed, tailored to the particular circumstances facing the economy and pursue a proactive supervisory approach. We would welcome staff elaboration on the apparent inconsistency between note to Table 1.1 and paragraph 36. Are macroprudential policy tools available but not used or need to be urgently developed in a number of economies?

In light of the excessive build-up of debt in some emerging and frontier markets, we call for bold policy actions to address debt vulnerabilities. While the rebound in capital flows to EM and Frontier economies is a positive development, this has been partly due to favorable external conditions rather than improved domestic fundamentals. This render these economies prone to capital reversal should a major shift in risk appetite materialize. It is therefore important to mitigate any debt sustainability risk by pursuing prudent debt management practices and adopting strong debt management frameworks. Also, we cannot overemphasize the importance of continued development of local bond markets, which could help in enhancing resilience to external shocks. Furthermore, we support enhanced coordination among all creditors and IFIs to achieve the common goal of strengthening debt sustainability.

We call for a better and more holistic approach on sustainable finance. In particular, we need to fully understand the implications of incorporating ESG-related principles, including into financial disclosure and credit rating, especially in the context of developing and low-income economies. As of now, there is no globally unified ESG standard. It is therefore important to better understand the challenges and the costs that these economies could face, including the rise of unfair market competition or the potential limitation on access to financial markets. We wonder whether the analytical chapter has benefitted from inputs from relevant international organizations with expertise in this area. On the scope of green finance, we believe that all types of clean energy sources as well as technologies to mitigate emissions should be considered. Indeed, any future green investment should include financing for turning fossil fuel infrastructure to be less emitting.

Fiscal Monitor

At the outset, we would like to recall the purpose of Fiscal Monitor. Fiscal Monitor was launched in 2009 as a response to "the increasing fiscal challenges in the aftermath of the global financial crisis". We are concerned however about its shifting focus, at a time when the global economy faces acute fiscal challenges and when policymakers have limited policy space to deal with any downturn. Here, while we appreciate staff's coverage of issues like climate change, we miss any coverage of the pressing fiscal risks or the recommended fiscal policies to deal with the increasing vulnerabilities in the global economy, in line with the initial purpose of Fiscal Monitor. Can staff clarify whether there was a plan for the main chapter in the Fiscal Monitor to cover fiscal issues and risks, as pages 6, 31, and 35 and Footnote 10 of the WEO and paragraph 20 of Chapter 6 of the GFSR refer to issues related to climate change as Chapter 2 of the Fiscal Monitor?

Regarding climate change, Saudi Arabia is fully committed to creating a better environment for our future generations. In 2015, we pledged, among many other nations, to strengthen the global response against climate change through mitigation as well as adaptation. Notably, we continue to believe that each country should have its own discretion to determine its policy tools to meet its commitments. In this context, we note that the FM argues for carbon taxes as being the most powerful and efficient instrument, but we strongly disagree. Indeed, as underlined in the March Board meeting, other fiscal instruments or regulatory measures could have an important, and sometimes preferable, role to play, depending on country circumstances and preferences.

We reemphasize that Paris Agreement on Climate Change must preserve the bottom-up approach. This means taking action locally while preserving global commons. Actions that address national circumstances and priorities should be the driver for international commitments. In addition, implementation of the Paris agreement must be comprehensive and balanced to achieve the three goals of Paris Agreement (Temperature, Adaptation, Finance flow), without sacrificing sustainable development and poverty reduction. We invite staff to clarify how this was reflected in the FM. In our view, focusing on CO2 emissions, whereby it only targets fossil energy, as opposed to addressing all GHGs that are emitted from different sectors, i.e. AFOLU (Agriculture, Forestry, and Other Land Use) is not appropriate. Here, staff's comments would be welcome.

Several studies have showed that fossil fuel is needed to provide affordable energy and eradicate poverty as well as ensure access to reliable energy for many decades to come. Therefore, there is a need to find ways and means to advance fossil fuel clean technologies to achieve the Paris Agreement's overall objectives and meet Sustainable Development Goals (SDGs). Staff's comments on the Fund's efforts to cover work in this area would be welcome. To maintain strong economic growth and advance development, focus should be on reducing emissions rather on limiting fuels.

Distributional considerations are very important and cannot be overlooked. Imposing carbon taxes over and above the existing huge tax burden on fossil fuels will make the situation even more regressive since the burden of high energy prices fall disproportionately on poorer segments of population. Providing targeted assistance to lower-income households by developing a robust social safety net remains a challenge in many developing countries in view of important administrative capacity limitations.

Finally, we reiterate that each international organization, including the Fund, should base its work in line with its mandate and comparative advantage while the UN Framework Convention on Climate Change (UNFCCC) should be the primary forum for negotiating the global response to climate change.

Process

We very much appreciate staff work on the flagship reports. At the same time, we underline the importance of adherence to the two-week circulation period. This is essential for Directors to effectively engage with their authorities.

The representatives from the European Central Bank submitted the following statement:

We thank Staff for their substantial set of flagship publications that in our view captures well recent key economic and financial developments and the policy challenges at the current juncture. We broadly agree with the policy recommendations made in the report. More specifically, we would like to make the following observations:

World Economic Outlook

We broadly agree with IMF staff on the assessment of the current global economic situation, the factors behind the weak global growth and the downside risks to the medium-term outlook. Intensifying US-China economic tensions have dampened the already subdued and fragile business confidence, hurting the outlook for investment, global manufacturing and trade activity. In addition, heightened geopolitical tensions in the Middle East and Asia, elevated policy uncertainty in Europe and the US, and a resurgence of severe macroeconomic challenges in Argentina have added to the fragility of the global economy. The pick-up in global growth in 2020 (and beyond) projected by IMF staff is predicated on a rather strong cyclical recovery in emerging markets which is, in our view, increasingly less likely to materialize. The lasting Sino-American tensions, persisting geopolitical tensions and elevated policy uncertainty will, in our view, continue to weigh on global output and trade flows, limiting the growth prospects for both advanced and emerging economies. In addition, several major economies including US, China and Japan are expected to slow down over the forecast horizon, raising doubts about the underlying growth drivers in emerging markets.

We broadly share the IMF’s view of the euro area economic performance and growth prospects in the near-term. We echo the IMF’s view that the observed drag on euro area activity since mid-2018 is largely rooted in the weakness in foreign demand, while domestic demand has proven more robust so far. As mentioned by the IMF we also see that factors behind these developments include the sharp downturn in the automobile sector (incl. supply-side disruptions in Europe and broad-based softening of demand) and Brexit-related uncertainty, while the impact of intensified trade tensions and elevated policy uncertainty on euro area investment and GDP growth has also been substantial. Looking forward, we agree with the IMF’s expectation that euro area activity is expected to pick up modestly in 2020, although our projections point to a somewhat more subdued growth outlook. Although we assess that very low financing costs for corporates and households and some fiscal policy measures are expected to support the growth momentum, the outlook continues to be dragged down by the subpar developments in the external environment. While the still relatively robust labour market should support private consumption in the near-term, the longer the weakness in the manufacturing sector continues, the higher the risk that it might eventually spill over to the services sector and employment.

We agree with the IMF's assessment of a downward revision to the euro area inflation outlook, with HICP inflation expected to be volatile around rather subdued levels until the second half of 2020. The euro area inflation outlook has been revised down over the whole projection horizon. These revisions are largely explained by the energy component, due to lower oil prices. In addition, HICP inflation excluding energy and food is also revised downwards, reflecting weaker data outturns, weaker activity and indirect effects from lower energy prices, as well as persistent past over-predictions.

We share the IMF's assessment on monetary policy in the euro area, as we see the need for a highly accommodative stance for a prolonged period of time. The ECB's Governing Council in September 2019 took a number of monetary policy decisions, including lowering the deposit facility rate and strengthening the forward guidance on the key ECB interest rates, with rates now being expected to remain at present or lower levels until we see the inflation outlook robustly converge to a level sufficiently close to, but below, 2 percent within our projection horizon, and such convergence has been consistently reflected in underlying inflation dynamics. It addition, we announced the restart of net asset purchases from November 2019 onwards while continuing the reinvestments of the sizeable stock of acquired assets, making the modalities for the new series of Targeted Longer-term Refinancing Operations more favourable and introducing a two-tier system for banks' reserve remuneration. The Governing Council stands ready to adjust all of its instruments, as appropriate, to ensure that inflation moves towards the inflation aim in a sustained manner, in line with its commitment to symmetry.

On fiscal policy, we broadly share the IMF's assessment and emphasis on the need for a timely and differentiated policy response. The mildly expansionary euro area fiscal stance is currently providing some support to economic activity. However, given the slowdown in growth, coupled with downside risks, countries with fiscal space and large current account surpluses can make use thereof to boost high-quality tangible and intangible investments. In parallel, countries where public debt levels are high should continue rebuilding fiscal buffers and pursue prudent policies that will create the conditions for automatic stabilizers to operate freely. Overall, a timely, differentiated and well-calibrated policy response with an appropriate policy mix that avoids pro-cyclicality should be considered. All countries should reinforce efforts to achieve a more growth-friendly composition of public finances. In our view, all member states should in addition continue to pursue structural policies to ensure sustainable and inclusive growth and improve the quality of public finances by shifting public resources towards investment, while macro-prudential policy should do its part to ensure financial stability.

On global imbalances, we fully agree that their persistence continues to present a medium-term financial stability risk for the global economy. In this regard, we underscore the importance of sustainable macroeconomic policies to preserve global external stability. We reaffirm our long-standing commitment to market-determined exchange rates that reflect underlying economic fundamentals, to avoid persistent exchange rate misalignments and to refrain from competitive devaluations, as well as support the need to preserve a well-functioning multilateral framework which relies on co-operative solutions to achieve strong, sustainable and inclusive growth. We stress the lack of evidence that protectionist measures are in any way facilitating the adjustment process in terms of external imbalances while it has increased global uncertainty and contributed to the ongoing weakness in trade flows, and in this regard, share the view that an intensification of trade tensions could dislocate global supply chains and harm the medium-term productivity prospects of the world economy. Finally, we welcome the ongoing analytical efforts to improve the modelling of external imbalances, gauging the implications of dominant currency pricing for the adjustment of trade prices and volumes.

Fiscal Monitor

We welcome the Fiscal Monitor's timely and useful contribution to the discussion on how to best mitigate climate change, highlighting the key role that fiscal policies will need to play in this process. The Fiscal Monitor argues that carbon taxes are the most powerful and efficient instrument for reducing fossil fuel CO_2 emissions, especially if they are coordinated and adopted simultaneously and consistently in most large economies. We consider this focus on market-based instruments and carbon pricing to be particularly useful The Fiscal Monitor also touches upon a broad range of additional policies, including targeted fiscal incentives, regulation, and financial policies, reflecting the broad range of policies being pursued in the EU, for instance the proposed Sustainable Europe Investment Plan which aims to support €1 trillion of investment over the next decade.

Global Financial Stability Report

We agree with the main thrust of the IMF's assessment of global financial stability risks and vulnerabilities. The weakening macro-financial environment and the associated low interest rate expectations contribute to low bank profitability, alongside more important structural factors, and remain the main risks for the insurance and pension fund sectors. Notably, the ensuing search for yield has contributed to stretched valuations, amidst increasing risk-taking by non-bank financial institutions and elevated corporate sector vulnerabilities. Although asset price overvaluation is more pronounced in the US compared to the rest of the world, key risks in the non-bank financial institutions follow similar trends in the euro area to the ones noted in the GFSR analysis. These developments contribute to the further build-up of vulnerabilities, driven mainly by the non-bank financial sector. Although the "low-for-longer" interest rate environment mitigates many of the possible triggers for corrections over the short to medium term, abrupt corrections remain an important risk in the near term and credit risk in the intermediate term. Overall, risks to global financial stability remain elevated.

Against this background, we concur with the IMF that appropriate policy responses need to be tailored to country-specific conditions. Notably, we agree with the need to balance appropriate macroeconomic and macro-prudential policies based on the particular vulnerabilities and the available policy space of each country. In that context, it is important to note that monetary policy tools can be further recalibrated to achieve their objective. However, a different policy mix, with a stronger emphasis on fiscal policy, structural reforms and prudential measures, can help achieve results faster, with fewer side effects.

Macro-prudential policies remain a key tool for addressing pockets of vulnerability in the financial sector. We agree with staff that more countries would benefit from actively using macro-prudential policies to increase their financial systems' resilience or to limit the accumulation of vulnerabilities. In the banking sector, a more active use of the countercyclical buffers could be desirable in some jurisdictions. Moreover, we also see that the macro-prudential toolkit needs to be extended to cover the growing non-bank financial sector. Notwithstanding considerable progress made in strengthening the EU regulatory and supervisory framework for non-banks, the share of non-bank financial intermediation has been growing in the EU, and thus the sector requires close monitoring. In that regard, we support the IMF's advice to add more explicit consideration of liquidity risks (including those stemming from derivative exposures) in regulation, governance and disclosures to the policy actions for pension funds, while recommending this action be extended also to life insurers. Additionally, we encourage the development of system-wide stress testing tools including the non-financial sector.

We welcome the insightful analysis of vulnerabilities related to USD funding of global banks and agree that they need to be carefully monitored. In the euro area dollar liquidity and funding risks have declined since the global financial crisis, owing in part to regulatory reforms. As regards central bank swap lines, we agree that they have been effective in mitigating financial stress in foreign currency funding markets. However, it should be stressed that these are monetary policy instruments and can be used only in line with the mandate of the respective institutions.

We welcome the analysis by the IMF on the link between sustainable finance and financial stability as an important contribution to an increasingly relevant topic. The physical and transition risks to the financial sector from climate change and environmental degradation can be mitigated by further scaling up sustainable finance and better risk monitoring and management. In that regard, we agree that the EU taxonomy – that is currently under negotiation - would help to address the current lack of consistent methodologies and reporting standards by establishing a common concept of environmentally sustainable activities. Multilateral cooperation is important in that respect. The ECB and the Eurosystem central banks are also working on improving the understanding of climate related risks from a financial stability perspective, including definitions and measurements of such risks. Among others, the ECB will continue its dialogue with credit rating agencies and other market participants to further promote the incorporation of ESG factors in risk assessments.

The Economic Counsellor and Director of the Research Department (Ms. Gopinath), in response to questions and comments from Executive Directors, made the following additional statement:[5]

The global economy is in a synchronized slowdown. (Slide 1) Growth in 2019 is at its lowest level since the global financial crisis. This reflects rising trade barriers and geopolitical tensions that are leading to a broad-based slowdown in industrial output and trade. It also reflects a gradual structural slowdown among advanced economies and China, and idiosyncratic factors

[5] Prior to the Board meeting, SEC circulated the staff's additional responses by email. For information, these are included in an annex to these minutes.

weighing on growth in some emerging markets. We expect a modest recovery in 2020. However, this remains precarious.

The downside risks remain elevated amid high policy uncertainty. Trade and geopolitical tensions could disrupt supply chains and further hamper growth. A projected growth pickup in emerging market economies (EMEs) and the euro area could be elusive. These factors could lead to an abrupt shift in risk sentiments, which could expose financial vulnerabilities built up over years of low interest rates. Low inflation could also become entrenched and constrain monetary policy space in the future.

The global economy is at a difficult juncture. There is an urgent need to cooperatively de-escalate trade and geopolitical tensions. Economic activity needs to be supported using a more balanced approach. In this regard, accommodative monetary policy should be coupled with fiscal support, where space is available, to fend off risks to growth and raise potential output. Simultaneously, structural reforms need to be undertaken to boost productivity, resilience, and equity.

The divergence between manufacturing and the services sector persists. (Slide 2) As you can see on the leftmost chart in the slide, manufacturing Purchasing Managers' Indexes (PMIs) have weakened sharply, while services PMIs have held up much better. The middle graph shows that this phenomenon is geographically broad-based, with many economies having better-performing services PMIs, as compared to manufacturing PMIs. This divergence between manufacturing and services raises concern about the future of the services sector. When one looks at leading indicators, like the new services orders, there is some softening in countries like Germany, the United States, and Japan, while they continue to hold up in China.

There are a few reasons for the weakness in manufacturing. (Slide 3) One is the elevated trade policy uncertainty, which is shown on the leftmost chart as a green line, which is denting business confidence, which is shown there as the red line, leading to weakness in investment and in consumer durable purchases. In addition, there are also idiosyncratic factors, like what is affecting the auto sector, in the middle chart, for instance, new fuel emissions standards in Germany and China. These events are leading to considerable weakness in vehicle sales, almost to the levels of the global financial crisis. The rightmost chart shows that there is also a downturn in the tech cycle, and you can see that in weak revenues in the semiconductor industry.

On the other hand, because the services sector continues to hold up, labor market outcomes have held up in advanced economies this far. (Slide 4) In the leftmost chart, unemployment rates are close to historic lows for some advanced economies. In the middle chart, the green line shows that private sector wage growth continues to hold up. However, there is some slowing wage growth in the manufacturing sector, and there is some slowing of employment growth.

Despite wage growth picking up, inflation expectations, shown in the rightmost chart, have weakened for some advanced economies since the middle of 2018. This generates concerns of de-anchoring inflation expectations.

Weakness in manufacturing goes along with weakness in international trade. (Slide 5) Trade volume growth is at about 1 percent, which is its slowest pace since 2012. You can see that with the black line, which is coming down quite significantly. Some of the major contributors in this regard are China, East Asia, but also Latin America.

As the rightmost chart shows, the tariffs are having a serious negative impact on growth. Our estimates of the impact of tariffs between the United States and China, those that are implemented and those that have been announced, are expected to reduce the level of global GDP in 2020 by 0.8 percent, with somewhat larger effects for China, as compared to the United States.

Monetary policy has already turned accommodative to offset some of these headwinds. (Slide 6) The leftmost chart captures the fact that monetary policy has eased almost simultaneously across the major central banks of the world. In the absence of the monetary policy support that has been put in place, global growth in 2019 and in 2020 will be lower by about half a percentage point. If you compare the green bar to the purple bar, this easing has almost simultaneously had a bigger impact on the global economy. The middle graph shows that there also has been fiscal easing, though to a much lesser extent, but the fiscal easing, which also has had some simultaneous effects around the world has also helped offset some of the headwinds.

Going forward, the question is what the mix of policies would look like. On the one hand, if we look at advanced economy debt levels, they have gone up; but on the other hand, we do see that the borrowing rates have declined quite significantly, opening up some more fiscal space. Mr. Adrian will go into the details of the impact of monetary policy easing on financial risks, and Mr. Gaspar will explore how much fiscal space exists and how much it varies across countries.

With this, let me turn to the projections. (Slide 7) Once again, we are revising down the projection for global growth for 2019 to 3 percent. This is the lowest level in the last decade. This reflects a broad-based slowdown across both advanced economies and emerging markets. We project a modest pickup, to 3.4 percent in 2020, but it is important to note that this is not broad-based, and it remains precarious.

Advanced economies have been revised down for 2019 to 1.7 percent, and they are expected to stay there. In the case of the United States, we have had negative revisions coming from trade policy but then positive revisions coming from policy stimulus. In the case of the euro area, weakness in external demand has led to downward revisions. Some significant revisions are for advanced Asia, including Korea. That comes from countries like Korea, Singapore, and Hong Kong. Some of this is coming from exposure to softening growth in China and to exposure to the U.S.-China trade tensions.

For emerging market and developing economies (EMDEs), we are revising down growth for both 2019 and for 2020. (Slide 8) This is quite broad-based across most of the major emerging market economies. As for specific countries, in the case of China, negative revisions have come from trade tensions but also from needed regulatory tightening, financial tightening in China. In the case of India, there was particularly weak domestic demand in 2019, but we expect that the policy stimulus that has been put in place will lead to a reversion back to 7 percent in 2020. For commodity-exporting economies, we have a significant downward revision that reflects supply disruptions in countries like Russia, Brazil, Chile, and sanctions in Iran.

Low-income and developing countries (LIDCs) remain at 5 percent, which looks healthy. However, there is a great deal of heterogeneity. Countries like Vietnam and Bangladesh are doing much better than commodity-exporting countries.

For emerging markets, there is an improvement in 2020, from 3.9 percent to 4.6 percent. This is what is driving the overall global growth uptick in 2020. The reason this remains an uncertain number is because about half of it comes from either recoveries or shallower recessions in stressed emerging markets, and the rest comes from improvements and recoveries in other emerging markets that had a particularly weak 2019.

Let us now look at these growth numbers in perspective. (Slide 9) The leftmost chart compares the 3 percent number for 2019 to what growth looked like over the last 25 years. What the figure is basically communicating is that 3 percent is well below the median level of growth over the last 25 years for the world, for advanced economies, and for emerging markets. Low-income developing economies are certainly doing much better.

The middle graph looks at the probability that global growth will be less than 2.5 percent one year ahead. Why 2.5 percent? Because that is at the tenth percentile of the global growth outturns over the last 25 years. What you see is that there has been some increase in the probability that growth will go below 2.5 percent since last April. That, however, remains modest. We have to keep in mind that this does not take into account the worst-case outcomes in terms of downside risks.

Some of the slowing or weakness in global growth reflects the fact that population growth has also slowed over the last 25 years. However, if one looks at the rightmost chart, for emerging economies, excluding China and India—which is the blue line—we are looking at a number of 0.5 percent, which is quite low and makes convergence toward advanced economy standards much less likely.

On the risks, we flagged geopolitical risks and policy uncertainties. (Slide 10) The blue line and the red line are going up in the leftmost chart. These reflect uncertainties related to trade policy, but they also reflect Brexit-related uncertainty and other geopolitical risks.

What the middle graph shows is the risk that could come from an escalation of trade tensions to, say, the auto sector. Our estimates show that tariffs on cars, excluding those between the United States-Mexico-Canada Agreement (USMCA) area, would lead to a significant negative impact on growth, especially for the United States, Germany, and Japan.

In this environment of trade policy uncertainty, portfolio flows to emerging markets have been volatile. On the plus side, they have benefitted from low interest rates, but heightened uncertainty has also had a negative impact on their portfolio flows.

On the plus side, emerging markets are somewhat more resilient to volatile capital flows and to currency movements than in the past. (Slide 11) Why is that? The leftmost chart demonstrates that while liabilities in EMDEs have grown, they have shifted more toward local currency debt. They have also built up foreign currency assets, which means that, on net, their foreign currency exposure looks much better.

What the right-hand graph shows is that exchange rate pass-through into inflation has also come down in the last few years, thanks to more anchored inflation expectations, using better monetary policy frameworks.

In the World Economic Outlook (WEO), there are two new chapters that examine the importance of structural reforms. (Slide 12) Chapter 2 looks at regional disparities within advanced economies. What it shows, depicted on the leftmost side, is that there has been a pickup in regional disparities since the late 1980s and lagging regions have had worse labor market outcomes and health outcomes.

If you look at what is behind this increase in divergence, while trade policy has often been blamed, for the average advanced economy, it tends to be more about automation and regions that are more exposed to automation having bigger negative effects.

What the right-hand chart shows is that national policies do matter and how the regions adapt to shocks. Countries that have more flexible labor markets or product markets are able to better cope with negative shocks, either on the trade front or through automation.

Chapter 3 examines the urgency for continuing structural reforms in EMDEs and in LIDCs. (Slide 13) In the leftmost chart, the average index of reform has flattened out for both emerging markets and for low-income countries (LICs), which again slows the pace of convergence. There is an urgent need to pick that up.

The next two charts show that timing does matter when undertaking these kinds of reforms. If you look at a particular reform, like labor market reforms, it pays off much better in good times, as opposed to in bad times. The rightmost chart shows that the sequencing matters. You are more likely to benefit from product market reforms if you already have good and strong governance, as demonstrated by the green bar.

The Financial Counsellor and Director of the Monetary and Capital Markets Department (Mr. Adrian), in response to questions and comments from Executive Directors, made the following statement:

Let me turn to the financial stability assessment. As Ms. Gopinath pointed out, interest rates are lower, and they are expected to stay low for longer, compared to just six months ago. The change is even more dramatic when compared to one year ago. I will discuss the financial stability implications of those developments.

Let me provide the main messages of the Global Financial Stability Report (GFSR) at a glance. (Slide 1)

Key vulnerabilities in the global financial system include rising corporate debt burdens, increasing holdings of riskier and more illiquid assets by institutional investors, and an increased reliance on external borrowing by emerging and frontier market economies.

Our policy recommendations include: To address corporate vulnerabilities with stricter supervisory and macroprudential oversight; to tackle risks among institutional investors through strengthened oversight and disclosures; and to implement prudent sovereign debt management practices and frameworks.

Let me start with an overview of market developments. (Slide 2) As Ms. Gopinath explained, the monetary cycle has turned in recent months. The left chart shows that central banks across the globe have adopted more accommodative policies. In fact, around 70 percent of economies around the world in GDP terms now have an easier monetary policy stance. The right-hand chart shows that for major economies, market participants expect monetary policy to ease further.

As a result of the easing of monetary policy, the share of negative yielding debt has reached about US$15 trillion. (Slide 3) For advanced economy government securities, about 20 percent of bonds are expected to have negative yields for at least three more years, and about 40 percent are yielding less than 1 percent.

As a result of this sharp adjustment in the stance of monetary policy, financial conditions—a broader gauge of the pricing of risk in the economies—have eased, particularly in the United States and in the euro area. (Slide 4) That is shown on the left-hand side. On the right-hand side, focusing on the blue shaded areas, one can see that the lower interest rates have contributed to an easing of financial conditions around the world.

In terms of other asset prices, there is some heterogeneity. For example: Corporate valuations continue to ease in the United States, but they have tightened in other advanced economies outside the euro area and the United States. They have tightened in China. But interest rates have eased around the globe.

In our financial stability assessment, financial conditions are one important input. (Slide 5) The second important input is financial vulnerabilities. This shows an overall view of our assessment of financial vulnerabilities for the 29 most systemically important countries. Those are the 29 countries that have Financial Sector Assessment Programs (FSAPs) at the five-year cycle. What one can see in the gray shaded area is the most recent assessment of vulnerabilities. There has been an increase in the non-bank financial sector. We now gauge vulnerabilities in that sector globally to be about at the same level as during the global financial crisis. Vulnerabilities among corporates, so non-financial corporates, remain high as well, and they are much higher than during the global financial crisis 10 years ago.

We also see some vulnerabilities building in the sovereign sector—Mr. Gaspar will expand on that—whereas, the banks are much safer, with tighter regulations, tighter capital and liquid requirements. Compared to the global financial crisis, banks are much safer, and the household sector is also much less of a concern today, compared to 10 years ago.

In our assessment of financial stability, these financial conditions and the financial vulnerabilities feed into our quantitative assessment of the macro-criticality of financial stability, which we refer to as growth-at-risk.

This is our estimate of global growth as a function of these financial variables. (Slide 6) We particularly focus on the left tail of these distributions. The fifth percentile is one way to gauge the severity of these tails. In the near term, the fifth percentile is about 2.5 percent, so about the cutoff that Ms. Gopinath was talking about. Here, we define near term as being over the next year. Ms. Gopinath was talking about one-year growth one year ahead. I am talking about growth over the next year. It is a bit lower than the 8 percent that Ms. Gopinath was talking about—the two and a half years at 5 percent. The medium term, on the other hand, does look riskier. The fifth percentile for global growth is actually negative in the medium term.

Basically, the story is that with easy financial conditions, vulnerabilities keep building up, and that is putting growth at risk in the medium term. Policymakers have the ability to counteract that with macroprudential policies, which is our baseline policy recommendation.

Let me dig deeper into the vulnerabilities. I will start with a deep dive into asset valuations. (Slide 7) We do see stretched asset valuations in some equity markets, notably, in the United States and in Japan. The United States is notable because there has been a run-up in valuations since the last GFSR in April.

When we look at the corporate sector, we see overvaluation—i.e. a compression of yields, indicated by negative numbers here—across a wide array of markets. The only exceptions here are emerging market investment-grade bonds.

With easier financial conditions and stretched valuations in some countries, leverage in the corporate sector keeps increasing. (Slide 8) The left-hand chart shows that the corporate debt-to-GDP ratio keeps increasing or has increased in France, Japan, Germany, and the United States. The main contribution of this increase is an increase in loans. The right chart shows the breakdown of those loans for the case of the United States. The loans on the balance sheets of banks—so commercial and industrial loans—keep rising slowly. But what are rising much faster are institutional leveraged loans and middle market loans. Those institutional leveraged loans are, to some extent, securitized in collateralized loan obligations and sold back into the financial system.

When we take a deeper dive, going beyond these aggregate statistics and looking at firm-level numbers, we can calculate corporate debt at risk. (Slide 9) These are firms that have a very low interest rate coverage ratio. We can see that corporate debt at risk is increasing in many jurisdictions and in an adverse scenario, as of 2021. So if we assume that adverse shocks hit two years from now, we can see that this corporate debt at risk could rise to US$19 trillion in a downturn. This is about a third of the total corporate market.

Easy financial conditions stretched valuations—corporates are taking on more leverage. Investors are reaching for yield. (Slide 10) Investment funds have increased their debt holdings of lower quality or unrated debt—that is in the left chart. Pension funds have higher exposures to illiquid alternative investments—that is in the middle chart. Life insurance companies, particularly in Asia, have raised their foreign investments. For example, the share of U.S. dollar credit owned by Asian investors has gone from 8 percent to 11 percent over the past five years. That represents about half of the foreign investments of Asian insurance companies.

There is reaching for yield by investors, and emerging markets benefit from those capital flows. (Slide 11) The flows are robust, particularly for hard currencies. For local currency flows, there was somewhat more volatility over the past year.

When we look at the cumulative impact of external and domestic drivers on the pricing of Emerging Market Bond Index (EMBI) global spreads, we can see that it is primarily global factors that are driving the compression and spreads. Easy global financial conditions are the drivers of the valuations in those markets and, hence, of the capital flows to emerging markets.

Mr. Gaspar will go into more depth on how those capital flows are used. Are they used responsibly? (Slide 12) Capital flows are a very good thing, but they can also lead to an increase in risk. Indeed, when we look at the median emerging market, we do see that there is an increase of the ratio of foreign debt to exports, from about 100 percent to about 160 percent today. For those emerging markets that are the riskiest—this is proxied by the 75th to the 90th percentile—that ratio goes above 300 percent. There are certainly some emerging markets where we worry.

One particular aspect of worry is state-owned enterprises (SOEs). There are some countries where the sovereign is somewhat risky, and they have high exposures to SOEs that have low returns on invested capital. That is particularly risky and puts the country at risk.

Let me turn to frontier markets. (Slide 13) Frontier markets also benefit from easy global financial conditions. Hard currency bond issuance of frontier markets is at a record high for 2019. Many countries are using those flows responsibly and for good purposes, but there is also an increase in the share of frontier markets that have a high risk of debt distress. This is indicated in the right chart. Among the frontier economies, when we apply our Debt Sustainability Analysis (DSA), we see that in 2014, we did not assess any of these frontier markets to have a high risk of debt distress, but today nearly 50 percent of frontier markets have high risks of debt distress. That is something to worry about, and that is a message that we send consistently.

Let me now turn to structural issues. We have one analytical chapter. The analytical chapter looks at the U.S. dollar assets and liabilities of banks outside of the United States. (Slide 14) These are global banks that own U.S. dollar assets and that are funding those U.S. dollar assets. What the left-hand chart shows is that the cross-currency funding gap—the difference between assets and liabilities—is about US$1.4 trillion today. Those are primarily funded in foreign exchange (FX) swap markets that are exposing those banks to vulnerabilities. Indeed, using a regression analysis, what we show in the chapter is that shocks to the U.S. dollar funding market are translated into distress, or financial stability problems, in the domestic market. That has adverse impacts on the cross-border lending of those global banks.

Let me repeat that. The more you have a funding gap in the U.S. dollar market as a non-U.S. bank, the more you are exposed to adverse shocks in, say, the foreign exchange swap market and other U.S. dollar funding markets. Those adverse impacts translate into financial stability risks in the domestic country and in terms of the cross-border lending of those global banks. We are looking in much more detail at these issues within FSAPs as well, where we have looked particularly at these issues. There is a summary of those FSAP findings in the GFSR.

Finally, we have one chapter that is looking at environmental, social, and governance finance (ESG). (Slide 15) This is a fast-growing market segment globally. The chapter provides an overview of opportunities and challenges in this market segment, as well as some preliminary policy conclusions that are primarily focused on better disclosures and the better measurement of the extent to which these ESG funds and the ESG assets really are green or are social or have good governance. Green washing is a problem that we are talking about. Classification is also a problem that we highlight.

The Director of the Fiscal Affairs Department (Mr. Gaspar), in response to questions and comments from Executive Directors, made the following statement:

Let me provide an overview of the topics that I intend to cover before we go to the content slides. (Slides 1-2)

Interest rates are zero or negative, and that limits monetary policy. Both Mr. Adrian and Ms. Gopinath emphasized that. This situation is the case in many advanced economies. With economic activity weakening and both inflation and inflation expectations below target, where there is fiscal space, it is time to use it to support aggregate demand. If downside risks materialize, the largest economies should be prepared for coordinated action.

In most other economies, however, monetary policy is not constrained. At the same time, public debt and interest-to-tax ratios are elevated and continue to rise. Therefore, policymakers would be well advised to follow prudent fiscal policies, anchored by a medium-term framework. Otherwise, as has happened too many times in the past, complacency, fueled by low interest rates, may be followed by panic and disruption.

Moreover, fiscal policy is key in a comprehensive strategy for meeting the 2030 Sustainable Development Goals (SDGs). Building tax capacity is crucial to enable state capacity. Fiscal policy is central to curb global warming, and that is the key topic of the fall Fiscal Monitor. The Fiscal Monitor finds that the most efficient policy is carbon pricing. The associated revenues can facilitate transition, foster political acceptability, and improve efficiency.

Turning to advanced economies, I find this quite spectacular, although I am doing nothing else but repeating what Mr. Adrian and Ms. Gopinath have already said.

In advanced economies, we have a situation where debt ratios are substantially higher than what they were in 2007, but low interest rates have been such that the interest-to-tax ratio has been on a declining path. (Slide 3)

In the right-hand graph, if interest rates are in positive territory, the squares are blue. In 2007, the full rectangular column covering all these advanced economies was blue.

In 2016, when we published a staff discussion note (SDN) about the conduct of fiscal, monetary, and structural policies with constrained space, we had quite a bit of red--meaning interest rates were at zero or negative. The current situation is that red dominates. These things have become increasingly urgent.

You have already been exposed to the use of public sector balance sheets to analyze the financial position of countries' public finances in countries. (Slide 4) We argue that, in many cases, it is important to go beyond gross government debt and to concentrate not only on what countries owe but also on what they own.

Here, I will explain this chart telegraphically, but we have a comparison between Japan on the left and the United States on the right. There is the very high gross general government debt of Japan at 235 percent of GDP in the leftmost rectangle, and that compares with about 107 percent of GDP for the United States. But if you concentrate on debt held by the public, the numbers are much closer, with 102 percent for Japan and 81 percent for the United States.

The middle chart shows that when one does the static public sector balance sheet of the United States and Japan, taking into account all financial and non-financial assets and other liabilities over and beyond general government debt, the net asset position, the net worth of Japan is actually less negative than that of the United States. But the most enlightening part of the chart is the right-hand most chart, where we consider the impact of the current levels of private deficits plus the shortfalls implied by policy commitments associated with health and pensions mostly. The net worth of the United States turns to a negative position of more than 200 percent of GDP, while the position of Japan is 87 percent of GDP.

Please bear in mind that this is just a way of summarizing the information that has already informed our policy recommendations to both countries. I am quite happy to engage on the details of the argument.

Turning quickly to emerging market economies, what we see here is very much in line with what Mr. Adrian has covered. (Slides 5-6) We do have sharply increasing debt-to-GDP ratios in this group of countries and also a substantial increase in the interest-to-tax ratio.

If one looks at an indicator that typically signals vulnerabilities, that is foreign currency-denominated debt, we see that, in 48 countries, there was quite a substantial increase or there was an increase in the relative importance of foreign currency-denominated debt.

If we look at China (Slide 7), what we see is that the official balance, on the left-hand side chart, is a flat line, and we know that China has been offsetting the impacts of trade by engaging in tax cuts and infrastructure spending. Our policy recommendation is that it is appropriate to smoothen out the short-run effects of trade on the economy.

What you also see on the left-hand side, is that, if you use the augmented net lending borrowing concept that we have been using internally as an alternative measure of imbalance, it is now reaching about 12.5 percent of GDP. This borrowing by the general government leads to a situation where gross public debt, using the same concept, is increasing quite substantially. China does have space for fiscal policy to help the rebalancing of the economy; but the path of rapidly rising public debt should be taken into account. The way fiscal policy is used in the short run should be compatible with the long-run rebalancing of the economy.

Turning to LIDCs, the debt-to-GDP ratios have been increasing fast. (Slides 8-9) The interest-to-tax ratio has been increasing as well. Part of that has to do with the fact that nonconcessional debt has increased in relative terms. The link with this, with market developments has been covered by Mr. Adrian.

We have been arguing that the additional spending, public and private, which is necessary to meet the SDGs is quite sizable. (Slide 10) We have excluded advanced economies from this map, but you do see that the additional spending requirements are quite substantial, especially in Africa, where there is a concentration of dark blue.

If one thinks about this challenge, we thought it was useful to look at countries where it was possible to make a tremendous amount of progress in the last few decades. (Slide 11) We have picked Vietnam as an example of one of the case studies on the SDGs that we have conducted. What we see on the leftmost chart is that GDP per capita in Vietnam has increased substantially. Vietnam has been able to use the resources generated by this growth to increase social spending. We have portrayed their health care results because we have a longer time series, but actually, the results of Vietnam on education are even more impressive.

What you see on the rightmost chart is very important. Vietnam spends well. As a matter of fact, in the health care sector, Vietnam almost defines the efficiency frontier in this particular dimension. This is very important. I would be quite happy to discuss the details about the Vietnam experience.

Moving on to climate change, the topic of the Fiscal Monitor, this chart is something that you completely know, I am sure but to me is very mnemonic. (Slide 12-13) It is a memorable chart. On the leftmost side of the chart, there are temperature increases at zero. That is the pre-industrial average. If we continue along an inertia course, we have an increase in temperature estimated by scientists at four degrees.

Most of what we comment on in the Fiscal Monitor looks at the Paris Agreement pledges by countries in their national determined contributions. Scientists estimate that would lead to an increase in temperatures of about 3 degrees Celsius. (Slide 14) At the same time, one can estimate that, in order to limit temperature increases to 2 degrees, which is the upper range of what is considered safe, a carbon price of US$75 would be required. I want to illustrate what that means from an economic viewpoint.

If one would use a carbon price of US$75 uniformly around the world, 54 percent of CO2 emission reductions would come from China, 14 percent from India, and 30 percent from the United States. The reductions in these three countries would clearly dominate the reductions.

What would that mean for consumers? On the right-hand side, we should what the implications would be for retail prices of electricity. The range in the chart is from a 2 percent increase in France to an 89 percent increase in South Africa.

If we focus on what can be done and what the implications are of the policy alternatives, the leftmost chart shows that a carbon price of US$75 is regressive in China and the United States. (Slide 15) That is, the burden is more substantial for the first quintile, the poorest, than for other quintiles. It is actually progressive in India. But that is not good news at all, because it reflects the fact that access to electricity in India is poor. It is actually bad news.

The right part of the chart shows what happens in terms of the incidence, in terms of the burden if you consider the different possibilities of using the revenues to improve distribution, to compensate losers, to promote investment, or to reduce other taxes. What you see is that if you were to simply return the revenues as a uniform dividend to all the population, you would have a policy which would be highly progressive. The burdens on the poorest go sharply negative, and they increase.

Then we have combinations of policies that may focus on efficiency or may increase public investment or cut taxes, but try to compensate the worst off. In that case, you can have a more favorable overall efficiency result while, at the same time, protecting the lowest two quartiles.

I will now outline the policy recommendations across the three departments: the Research Department (RES), the Monetary and Capital Markets Department (MCM), and the Fiscal Affairs Department (FAD). (Slide 16) We have three blocks of recommendations. The first is to strengthen foundations for a recovery or continued growth; enhance resilience and inclusiveness; de-escalate trade and geopolitical tensions and roll back tariffs; address the roots of dissatisfaction with the global trading system; and improve the governance of trade.

For advanced economies the recommendation is to fend off risks to growth and inflation and to raise potential output. Accommodative monetary policy should be coupled with well-planned fiscal support, where space is available and policy is not already overly expansionary. A coordinated fiscal response may be needed in a more severe downturn.

In emerging markets and LIDCs, monetary policy can be eased to support weakening activity where inflation is tame. Countries with high public debt need consolidation. Better targeted subsidies and revenue mobilization can create space to raise social spending and preserve investments for boosting potential output and resilience, including in disaster readiness and climate-smart infrastructure. These countries should adopt structural reforms tailored to country circumstances to ensure stronger, more balanced, and inclusive growth.

Our second set of recommendations include: Safeguard financial and fiscal stability; deploy macroprudential tools where financial vulnerabilities are building, including outside the banking sector; address corporate vulnerabilities with stricter supervisory and macroprudential oversight; tackle risks among institutional investors through strengthened oversight and disclosures; implement prudent sovereign debt management practices and frameworks.

The last set of recommendations is to seek globally cooperative solutions; complete and implement the financial regulatory reform agenda; cooperate globally on cybersecurity issues and address big tech's entry into fintech. To curb climate change,, we should agree on carbon pricing goals, support vulnerable groups, promote green energy, and sustainable finance. We should also cooperate on other global public good problems. This includes global imbalances, international taxation, refugees, and corruption.

Mr. de Villeroché made the following statement:

I will try to be brief, but I will say that I am in full agreement with the presentations.

These are excellent presentations. They are framing the current situation well. We fully subscribe to the policy recommendations and we fully subscribe to some very interesting work which has been done. Staff mentioned climate as one of them.

The outlook is characterized by a broad-based growth slowdown, and we see mounting downside risks. Trade tensions are taking a toll on industrial activity, and there is a non-negligible risk of negative spillovers to the rest of the economy. As highlighted in the report, the main issue will be to reduce trade tensions now. Reviving multilateral cooperation is key to reduce uncertainty and avoid a man-made economic slump.

Having said that, we need to calibrate our policy recommendations. Over the last six months, the globalizing of monetary policy has been appropriate. It has reduced downward pressures. It is important that staff measure the impact of this easing of monetary policy. In the presentations, it is very much welcome. We agree with staff that monetary policy should remain accommodative until inflation is firmly re-anchored to its target.

In addition, we are somewhat concerned by some remarks made in the gray statements about the fact that lower inflation could be a structural phenomenon. Saying this could lead to further de-anchoring of inflation expectations. This could be particularly costly in the medium term and would limit monetary policy’s room for maneuver in case of future shocks.

We agree that a rebalancing in policies and a more active role for fiscal policy is needed, where fiscal space exists, and especially for countries with high current account surpluses as well. I do not want to elaborate on that.

Looking at the world economy and the size of countries, in the case of the euro area, a more ambitious euro area budget, if possible, would greatly help in terms of stabilization, especially at the current juncture.

On financial sector oversight, we agree with the recommendation to use more macroprudential measures. France has experienced several steps in this regard. I believe it has been successful. It has not limited good credit to the economy, and we think it is reducing risks. This is an appropriate recommendation.

More broadly, reducing current account imbalances through more balanced macroeconomic policies, both in surplus and deficit countries, will help in the long run to ease trade tensions and support more balanced global growth.

I thank staff for the excellent work on climate change. Given that this issue will remain relevant for the foreseeable future, we strongly support the further integration of climate mitigation into multilateral and bilateral surveillance. The product which will be issued during the Annual Meetings should, more or less, become a permanent production of the Fund.

Mr. De Lannoy made the following statement:

We thank staff for the interesting and focused set of reports and the presentations. We fully support the policy recommendations. We wrote an extensive gray statement, so I will try to be focused.

Risks around the baseline are negative and policy-based. The first-best solution is to make the right policy choices. This involves strengthening the rules-based multilateral system and reversing trade tensions, avoiding a no-deal Brexit, and addressing idiosyncratic risks in distressed emerging markets.

We should carefully tailor domestic policies to uphold growth and employment. We would like to caution, though, against the tendency to look for cyclical explanations for structural weaknesses. We are confronted with structural challenges related to demographic shifts, technological change, cyber risks, and climate change. We stress the importance of structural policies to enhance potential growth and to find solutions for these challenges.

For the policy mix, this means that monetary policy needs to remain accommodative, but we also note that it is reaching its limits. Disinflationary pressures are closely linked to structural changes in the economy, such as globalization, technological progress, and demographic changes. Monetary policy cannot make up for an escalation in tariffs.

On fiscal policy, we see automatic stabilizers as an important first line of defense. These are, by design, timely and targeted, and they can provide substantial stabilization. Strong cyclical indicators mean that this is still the right time to reduce debt levels, in particular, as public debt is still near historic peaks.

In addition, we caution against optimism about the snowball effect, which currently works in our favor, thanks to the low interest rate environment. A high debt stock still entails important risks when monetary policy normalizes further down the road.

Structural reforms can support global activity by sustaining potential growth rates. They can also reduce the burden on monetary policy. Reforms that unlock investments will increase the natural rates. The same applies to shifting public expenditure toward growth-friendly investments, including R&D, infrastructure, and the climate transition. We encourage staff to communicate with appropriate urgency about the need to prepare our economies for the challenges related to aging, technological change, and climate change.

Long periods of accommodative monetary policy, along with a decline in natural rates, has contributed to the accumulation of financial vulnerabilities. Staff shows that the coverage of the macroprudential toolbox is limited. This is cause for concern, in particular, because a further buildup of vulnerabilities under a low-for-long scenario seems increasingly likely. This means we should strengthen the macroprudential toolkits and fully implement the global financial reform agenda. We also call on the Fund to rethink how to incorporate financial stability, which may negatively affect growth and inflation in the medium term, in monetary policy frameworks.

We were very pleased with the attention to climate issues in the Fiscal Monitor and the GFSR. We encourage staff and management to further build on this analysis by providing regular updates in flagship reports and assessing climate policies in Article IV reports.

Like Mr. de Villeroché and others, we strongly support the integration of the assessment of climate change mitigation policies into the Fund's surveillance activity. We think this should be part of the Comprehensive Surveillance Review (CSR) and the FSAP review.

Finally, we agree with Ms. Levonian and Mr. Rosen that it would be good to always include at least a brief survey of the global debt landscape in the Fiscal Monitor.

Ms. Levonian made the following statement:

We thank staff for the presentations. They were succinct and well-articulated. I also wanted to mention that we enjoyed reading the documents, especially the new format for the GFSR.

We want to make six points. We wrote a long gray statement, so I will try to be succinct as well.

First, we agree that the outlook is precarious and that risks are tilted to the downside. On that point, like Mr. Sigurgeirsson and Mr. Merk, we found the baseline outlook to be somewhat optimistic.

Second, the widening repercussions of trade tensions are depressing industrial output and trade volumes and are weighing heavily on the outlook. At the multilateral level, we feel a cooperative resolution to the trade disputes is likely the most effective way out of this global slowdown. Economies need to recommit to the rules-based international trading system, alongside a collaborative effort to modernize the WTO. Domestically, we support the key policy message, that given limited monetary policy space in many countries, there is general room for fiscal policy to play a greater role. However, like Mr. Ray, we encourage the Fund to take care in encouraging the use of fiscal policy to support growth, given the elevated debt vulnerabilities in many countries.

Third, it is clear from MCM's analysis that easy financial conditions are leading to a buildup of vulnerabilities. In particular, we were struck by Figure 1.4, which shows that corporate vulnerabilities now exceed the global financial crisis levels. The first priority should be to avoid rolling back financial sector regulatory standards. As staff have pointed out, microprudential policy has a key role to play in managing these vulnerabilities, but it may be insufficient.

On the macroprudential front, we agree with Mr. Adrian and many colleagues who underscored that there may simply be insufficient policy tools or maybe not even in the right areas to address the vulnerabilities. Further guidance on the tools that can be developed to target the risk posed by highly leveraged firms would be helpful.

Fourth, like Mr. Rosen, we appreciate the GFSR's focus on the vulnerabilities created from rising debt in emerging and frontier markets, and especially with SOEs. It is important that the Fund continues to call for strengthened fiscal data and reporting and for creditors to adopt sustainable lending practices.

Fifth, we are pleased to see the Fund elevating the issue of climate change and sustainability, like Mr. De Lannoy and Mr. de Villeroché. The membership, particularly small island states vulnerable to rising oceans, are counting on the Fund to stress the macro-criticality of this issue.

Finally, with limited macro policy space to counter a downturn, it is timely to focus on the benefits of structural reforms. We hope that the findings of Chapter 3 serve as a call for renewed push for structural reforms in many emerging market economies. Like Mr. Lopetegui, we were struck by the lack of any noticeable improvement in the governance across the emerging market economies studied.

Mr. Merk made the following statement:

We thank the counsellors for the well-written and informative set of reports and today's presentations.

Let me first say that the WEO baseline projections appear to be somewhat optimistic —Ms. Levonian and other Directors pointed to this as well. So far, we do not see compelling signs for the expected pickup of global growth in the remainder of 2019. Staff's GDP growth forecast for the euro area and Germany is also slightly higher than our current assessment, particularly for 2020. Furthermore, risks at the current juncture are elevated, and vigilance is key. Ms. Gopinath convincingly made that point in her presentation.

Against that background, we strongly second the call for structural reforms to bolster potential growth and actions to strengthen resilience across all economies. Securing adequate fiscal, financial, and reserve buffers, as well as reducing elevated debt levels and financial vulnerabilities, remain of the essence to sustain stability, unlock confidence, and guard against external shocks.

To foster growth and investment, we need to remove and not increase barriers to free trade, upgrade the rules-based multilateral trading system, and strengthen confidence in international dialogue.

We take note of staff's recommendations for fiscal policy in the euro area. We would like to highlight that German fiscal policy is already quite expansionary. Currently, we see no need for additional fiscal stimulus. In addition, we note that fiscal spillovers in the euro area are rather low, according to our assessment.

We share the concerns raised by Mr. Adrian about the key vulnerabilities in the global financial system in the face of very accommodative monetary policies over a long period of time. In the current environment, it seems all the more important to complete and preserve the hard-won regulatory and supervisory advances, and even more so, proactively work against the further buildup of financial risks, including through micro- and macroprudential policies. Mr. Adrian explained that very well.

We welcome the remarks by Mr. Gaspar on debt vulnerabilities and his highlighting the role and the importance of prudent fiscal policies.

On climate change, we agree that an internationally coordinated approach is urgently needed. Let me also mention that the German Government has recently outlined the cornerstones of a climate action program, spelling out the way toward achieving Germany's ambitious climate targets for 2030.

Lastly, regarding the international tax debate, a remaining challenge is to reach a globally agreed solution on a fair taxation of the digitalized economy at the Organization for Economic Co-operation and Development (OECD) level, including the reallocation of taxing rights, as well as the global effective minimum taxation.

Ms. Riach made the following statement:

Let me start by thanking staff for the excellent set of papers and for today's interesting presentations. The papers well capture the mood of the moment, and by tackling difficult issues, will effectively frame discussions for our ministers and central bank governors.

We broadly agree with the assessment of the economic outlook and welcome the policy recommendations, in particular, the need to seek globally cooperative solutions.

We welcome the focus on trade tensions and the negative impact they are having on the global outlook. While this is not the only downside risk, trade tensions are weakening trade flows and raising uncertainty, with consequences for the whole global economy. Staff rightly make clear that we cannot afford further policy missteps.

We note Mr. Rosen's criticism that staff failed to take account of the potential for trade tensions to be resolved in a globally beneficial manner. I hope that such an upside will materialize. However, I would note that a positive outcome will require moderation in the actions and rhetoric of all players.

On Brexit, I recognize the view presented in a number of gray statements that staff have not given sufficient weight to the risk that the United Kingdom leaves the European Union (EU) without an agreement. It is certainly true that the political rhetoric has strengthened since April and that the chances of a no-deal exit on October 31 appear to have increased. However, I do believe that staff were right to maintain their central scenario as being an orderly exit, with a transition period. The underlying economics have not changed since April, and there is still a huge amount of uncertainty about what will happen in the coming weeks.

The Prime Minister of the United Kingdom yesterday wrote to the President of the European Commission, setting out his proposals for a new protocol on Ireland and Northern Ireland that would replace the so-called backstop in the previous withdrawal agreement. My authorities' strong hope is that these proposals can provide the basis for rapid negotiations toward a solution that allows the U.K. to leave the EU in an orderly fashion on October 31.

I have three more specific points. On the Fiscal Monitor, we welcome the shift in recent years to focus on a single thematic issue and are happy that broader fiscal assessments will be covered elsewhere in the flagship documents. The comprehensive analysis of how to mitigate climate change is a good example of how this approach can add real value to inform a topical policy debate.

On the London Interbank Offered Rate (LIBOR), we welcome staff's focus on LIBOR and the transition to alternative risk-free rates. It is important that the text reflects the recent discussions in the Financial Stability Board (FSB) and Basel and makes clear the urgency and benefits from transition. We had some concerns with the text, as originally drafted, and we are grateful to staff for engaging with us on this. For the benefit of the wider Board, it would be helpful if staff could elaborate on the set of changes proposed to their original draft text.

On LICs, we recognize the concern that Mr. Raghani raised in his gray statement about the coverage of issues affecting LIDCs, particularly in the Executive Summary of the WEO. This is a recurring problem. Given that, we particularly welcome Chapter 3 of the WEO on structural policy and the reform patterns in EMDCs, and support staff's commitment to continue to develop and expand the database.

We do find it unfortunate, however, that the 2019 report on macroeconomic developments and prospects in LICs will not be published until after the meetings. In the past, this document has informed the debate. In particular, the 2018 report was a good example, where the focus on debt was widely picked up in discussions around the Spring Meetings.

Mr. Lopetegui made the following statement:

We thank staff for the materials that have been prepared for this meeting.

We seem to be entering a complicated global juncture. Once again, the WEO has reduced its forecast for global growth, as trade and geopolitical tensions have continued to increase. Real GDP growth for this year is now expected to be lower for most countries and regions, and the increase in growth projected for 2020 may be on the optimistic side.

Since the WEO was elaborated, high-frequency indicators are signaling a sharper decline in industrial production, adding to these concerns. This is occurring after many central banks have already started easing cycles.

The report rightly underscores that fiscal space has been reduced in many countries, while monetary policy effectiveness faces limits, especially in the euro area. Easier financial conditions have been beneficial, but vulnerabilities continue rising. Their pricing of risk could be ongoing in some financial market segments.

The WEO suggests that in the case of a further downturn, countries where fiscal space exists could provide a stimulus, while in those countries where consolidation is necessary, its space could be adjusted, if market conditions permit.

Like Mr. Mouminah, Mr. Rosen, and other Directors, we missed an overview chapter in the Fiscal Monitor which could have been dedicated to this discussion; in particular, to elaborate on options for countries that have fiscal space and face very low interest rates on their debts.

This being said, traditional macroeconomic policies may not be enough to avoid a prolonged period of economic weakness and may fail to revive demand, given the high levels of policy uncertainty. This idea was clearly expressed by Mr. Lipton a few days ago and today by the counsellors, when they emphasized the importance of the escalating trade tensions. But I do not think the idea comes out as clearly in the WEO.

In our view, a second priority is for countries to pursue structural reforms vigorously, aiming at increasing potential growth. We believe that the special chapters in the WEO on regional disparities and structural reforms are relevant and timely. We concur with the main policy messages related to seeking more open and flexible markets, preserving the safety nets, and investing in human capital.

We concur with the assessment of the GFSR in relation to the financial risks and share the conclusion that macroprudential policies should be tightened, as warranted, to face increasing vulnerabilities, with the appropriate mix between them and fiscal and monetary policy being tailored to specific circumstances. At the global level, we agree on the need to complete and fully implement the regulatory reform agenda.

The Fiscal Monitor focuses on how to mitigate climate change. It is appropriate that this chapter presents the various alternatives available to reduce emissions and assess them on fiscal, environmental, and economic grounds. Notwithstanding that many countries have implemented carbon price initiatives, the document highlights the magnitude of the effort that remains to limit emissions. This effort should be substantial, to say the least.

We share the view that mitigation policies may need to be accompanied by other measures to address political and social sensitivities. We welcome the analysis in the document of a possible redistribution of the carbon tax.

Let me finish with a general comment on process. There is incredibly valuable material in the flagships, but we could also be a bit better in prioritizing the special topics to be covered on each occasion. To facilitate the discussion of the flagships by the Board, informal seminars on the analytical chapters ahead of this dedicated Board meeting could be useful. We should consider them as a best practice, as we did with the structural reform meeting days ago.

Mr. Spadafora made the following statement:

I thank staff for their excellent presentations and reports. Three features of the current slowdown stand out.

First, it comes with a signature which reads: trade tensions. The downward revisions since April are attributed by staff explicitly to the trade tensions. Because these downward revisions have been going on for at least one year and a half, we wonder if now is the time for staff to assess whether the impact of trade tensions is no longer only cyclical but also could be have some permanent effect.

After the 2008-2009 crisis, there was an assessment by staff on the permanent loss of output. I invite staff to consider this analysis, particularly in terms of assessing whether there are new channels for restorative effects, notably, through the global value chains.

The second feature of the impacts of the trade tensions have been felt mostly outside of the United States. The United States is the only country in the current WEO for which global forecasts have been revised upward. We can only hope that this does not weaken the incentives for resolving trade issues.

The third feature is that, against the background of very high debt as a legacy of the crisis, now the macroeconomic policy space is much more limited at a time when the economy faces major headwinds, which are well documented in the staff reports.

Against these features, we would like to reiterate the main message in our gray statement: Basically, that crisis prevention requires the policy to respond immediately, without waiting for a downturn to materialize. That would be a failure of crisis prevention, by definition.

A rebalancing of the policy mix, which is emphasized in the WEO, is our utmost priority. We strongly support this call, particularly in the euro area, where monetary policy is overburdened.

As has been pointed out, central banks have been proactive in responding to the slowdown in growth. The European Central Bank (ECB) in September adopted an important package of monetary measures, particularly, as the Economic Counsellor pointed out, because of a weakening of inflation expectations. in a context where debt is high, a weakening of inflation expectations is extremely dangerous because it raises the fears of debt inflation, à la Fischer.

A few days ago, President Draghi—twice in a few days—emphasized that the missing fiscal policy in the euro area is the big difference between the

United States and the euro area. There is a need for fiscal policy to be more active and to complement monetary policy. That will help foster action from unconventional monetary policy and will also help reach the inflation targeting more rapidly. We strongly support the staff's call for a synchronized fiscal policy response in the euro area.

Having said that, we are a bit disappointed that the staff calls for completing the banking union but is completely silent on introducing a central fiscal capacity in the euro area, which is a critical missing architectural feature in the euro area.

Finally, we commend staff for Box 1.4 in the WEO which, once again, points to the caution that is needed in interpreting the output gaps and the output potential. We strongly associate ourselves with Mr. de Villeroché and his colleagues in pointing out that there is a potential for doom, if output gaps are underestimated.

Mr. Saraiva made the following statement:

I thank the counsellors and their staff for the excellent presentations and the comprehensive, thoughtful flagship reports, which are well balanced, both in terms of the tone but also in its coverage of conjunctural and more structural issues.

We are in broad agreement with the diagnosis and the thrust of the policy advice. That said, I will focus on a few policy messaging issues for fine-tuning.

First, since our discussion of the draft Global Policy Agenda (GPA), I have been struggling with the word "precarious." I know it is not new in our vernacular. Actually, it was in the title of the previous WEO, regarding a precarious recovery. I just do not like the image of our economic outlook hanging on a cliff. This is something I do not favor, like painting a rosier picture than what we have. But I also would not like to see the Fund as the harbinger of self-fulfilling doom prophecies.

In terms of our policy advice—on which I broadly agree—we could perhaps be a little more forceful on the domestic policy side, as suggested by Mr. Rosen, Mr. Fanizza, and Mr. Spadafora.

On the international multilateral front, it is clear that we need to address the source of uncertainty, in particular, the trade tensions, as well as the risks of a no-deal Brexit. But I would prefer a clear message of support to the accommodative monetary policy, where inflation is below target and the output gap is negative, as well as the recommendation that fiscal policy should be supportive where fiscal space exists, which is the case in many advanced economies.

I hear the points on saving ammunition for when the battle comes, but I believe policy action will be more effective, avoiding a downturn that could bring the global economy to a way more challenging situation than the one we have now.

Several Directors also mentioned that automatic stabilizers could do the job. I sincerely have doubts about that. I would like staff to comment on whether automatic stabilizers would be sufficient to shore up activity under this not-so-conventional cycle that we are witnessing. Of course, there are risks implied in this bold strategy, and the Fund must closely monitor the adoption of those supported policies.

In sum, we definitely need to use fiscal space where it exists and in a wise way, boosting productivity, enhancing investments and potential output, as well as fostering inclusion. Where debt needs to be brought to a sustainable path—and perhaps this is the case of many EMDCs--consolidation needs to proceed, as required, and in the most growth-friendly way as possible.

Over the past year, we have seen that the monetary policy normalization will not be a simple task, even if communication is clear and the steps are well anticipated. We also understand that low for long engenders vulnerabilities that need to be addressed. But targeted macroprudential measures are fitting as a way to avoid slipping into higher fragility.

I will take this opportunity to ask Mr. Adrian if he could elaborate on why the investment grade emerging market bonds are on the opposite side of the global trend.

Emerging market and developing countries should also take advantage of the more benign financial conditions to build up buffers and provide support to their economies in a sustainable way. Countries in our constituency are doing their part. This week, the Brazilian Senate has approved, in the first round, the pension reform, which is the next-to-last step for the constitutional amendments to take effect.

I also would like to highlight the issue about a carbon tax. The chapter was very good. But life is showing us that it is easier said than done.

Finally, I support Mr. Raghani's request to include LICs in the WEO Executive Summary.

The Chairman made the following statement:

As a non-native English speaker, I actually did run to the dictionary to make sure that I am capturing the word "precarious" well. Just to remind us what the dictionary says: "Not securely held or in position, dangerously likely to fall or collapse, and also dependent on chance, uncertain."

Based on what the report tells us, I thought that "precarious" captures all of this quite well.

Mr. Sigurgeirsson made the following statement:

I would like to thank the counsellors and their staff for the excellent presentations and reports.

To make a long story short, we are in broad agreement with the policy recommendations put forward by Mr. Gaspar at the end of the presentation.

We issued a comprehensive gray statement, where we included some concern about what we saw as optimistic projections. Today I will just highlight three issues that are important to our constituency.

First, global growth is not slowing amid trade tensions; it is slowing because of trade tensions. We must be clear about that, and the fact that we could be facing a further downturn, with limited policy space to fall back on. As this drags on, we may also be facing the prospect of more pronounced market reactions in asset markets due to this. The report alludes to this, and we heard some of that today in the presentations. Perhaps this narrative could be sharpened a bit.

We are often told that there is no panacea when confronted with difficult economic problems, but this time, it may be different. The best possible stimulus at this point would come from restoring confidence in the multilateral trade system and finding a path to resolve the trade and tech disputes.

My second point is on stretched asset valuations, which are causing concerns. Therefore, we welcome staff's analysis on increased risk taking amongst institutional investors. We also see a need for further strengthened macroprudential policy frameworks. We do not have to go far back in time to see examples of the perils of stretched valuations. I know more about that than I want to.

While it may not be the most ambitious benchmark—and the trend is going in the wrong direction, as we have heard today—the global financial sector is, apparently, in some cases, more resilient than before the global financial crisis, despite all this buildup of vulnerabilities. This can be fully accredited to the substantial financial regulatory reforms and clearly should not be jeopardized by any reform rollbacks. This is not the time for that.

Our constituency welcomes a focus on carbon taxes in the Fiscal Monitor. The Fund is well placed to analyze macro-critical climate change-related issues, such as the fiscal implications of the Paris pledges, as well as climate risks. We also believe that the Fund should step up its advisory work on how the goals can be reached in the most cost-effective way.

As expressed by some Directors in their gray statements, we strongly encourage staff and management to further build on this work by regularly updating this projection exercise in the flagship reports and by using the analytical tools to systematically assess climate policies in Article IV reports. This is something that we have talked about for years.

We also strongly support the integration of the assessment of climate change mitigation policies into the Fund's surveillance activity as part of the upcoming CSR and FSAP review.

Mr. Sun made the following statement:

We thank staff for the excellent reports and the presentations. We broadly agree with the policy recommendations and would like to focus on a few points for emphasis.

As many have said, the global economy is at a delicate juncture. The latest data pointing to weaker activity in the United States has brought jitters to the global markets. Policymakers need to take decisive actions to bolster growth prospects and resilience. Doing so requires a policy mix well suited to each country's policy space and circumstances, including structural reforms.

In China, we have been deploying a stimulus to support the economy and to keep monetary policy prudent, while continuing with structural reforms to foster quality growth. Reflecting these efforts, consumption has been the main driver of the economy, contributing 60 percent to growth in the first half of this year, 40 percentage points higher than investment.

On trade, we agree that unilateral and protectionist trade measures are doing more harm than good. We welcome the WEO's analysis, which has shown the damage that can be caused by a retreat from global integration.

China continues to support free trade and a rules-based multilateral system and looks forward to constructively resolving trade tensions and upgrading the current system in a cooperative manner.

On financial risk, financial vulnerabilities are building up against the background of easy financial conditions.

The potential risks associated with U.S. dollar funding fragilities highlights the need for supervisory vigilance, adequate reserves, and a strong global financial safety net. A more dovish monetary stance may be helpful in the short run but could have unintended adverse consequences in the long run.

We also need to be mindful of the potential impact of policy easing on exchange rate[s] and should avoid competitive monetary loosening.

Recent bank interventions in China are part of our ongoing efforts to strengthen the banking system. The targeted and the problem-specific approach to the three small banks have successfully prevented adverse spillovers to the broader banking system, and the banks' risks are largely contained.

On climate change, we agree that urgent action is needed to tackle the challenges. While there are benefits from a carbon tax, like Messrs. Ray, Tanaka, Raghani, Kaya, Saraiva, and others, we see a need for flexibility to encourage countries to use the most effective instruments based on country circumstances, such as an emissions trading system.

What is important is for countries to commit to and to reach the U.N. target. Dealing with climate change also requires actions beyond emissions reduction, such as investments in climate-resilient infrastructure and promoting green finance. Green bond issuance in China has been growing rapidly in recent years.

To conclude, safeguarding global growth requires a concerted effort by all countries. As China continues to do its part, the Fund has a more practical role to play in boosting confidence, facilitating international cooperation, and promoting multilateralism.

Mr. Mahlinza made the following statement:

We thank staff for the concise, yet comprehensive set of reports, and the clear presentations.

We broadly share staff's assessment of the current state of the global economy and note that the current slowdown is different from previous episodes, in that the dynamics at play stem from deep, significant political differences in systemically important advanced and emerging economies. Moreover, there is a distinctive uncertainty and skepticism regarding the power of global cooperation to find pragmatic solutions that confirm mutual benefits.

We agree that the outlook is precarious. Accordingly, urgent and concerted policy efforts are required to strengthen multilateral cooperation and, in key areas, to avoid a further materialization of downside risks. To this end, constructive dialogue is important to resolve trade tensions and foster a modern, rules-based multilateral trading system with the WTO at its center. Policymakers should avoid further policy missteps, while ensuring an adequate macroeconomic policy mix.

At the same time, we call for the Fund to continue to play its advocacy role to more forcefully reinforce these important messages in their discussions with policymakers, emphasizing the benefits for individual countries and the global economy.

We welcome the clear assessment of global financial stability risks in the GFSR and believe the strengthening of macroprudential toolkits is needed, as is the extension of regulatory and supervisory perimeter to cover non-bank financial institutions. More importantly, we reiterate the need for the completion of the global regulatory reform and the avoidance of rollbacks on the progress made thus far.

We appreciate the focus on climate change in the flagship reports. Climate change causes risks to the global economy, and its impacts are onerous for sub-Saharan Africa and other smaller developing countries. As such, urgent measures are required at both the national and the global levels to maintain emissions to limit the severity and frequency of extreme weather events. In this respect, we encourage advanced economies to honor their commitments under the Paris Agreement.

That being said, we also want to highlight the opportunity costs of introducing measures, such as a global carbon tax. Many sub-Saharan African economies and other developing countries are likely to be negatively impacted through reduced fossil fuel production and lower export revenues. In this respect, slide 14 of the Fiscal Monitor presentation, which shows that under a US$75 carbon tax, South Africa would need an 89 percent increase in price, is telling. We would caution that this should be looked at carefully in terms of messaging and communication.

On sub-Saharan Africa, we note that the growth prospects continue to be positive. However, challenges remain in sustaining broad-based growth across all countries, which impacts the speed of income convergence with advanced economies. We also welcome the newly constructed database on structural reforms discussed in Chapter 3 of the WEO and agree that there is room for further reforms, with significant output gains. However, like Mr. Ray, we would like to caution that the context in which reforms take place in some of our countries is not always clear cut. It is often complex. Consequently, we encourage staff to continue their work in this area, while supporting countries in their macroeconomic adjustments and structural reform processes.

Finally, like Ms. Riach, we are concerned that the report on macroeconomic developments in LIDCs has not been published on time. We would request that, going forward, this is rectified.

The Chairman remarked that she understood Mr. Malinza’s concerns about the LIDC report, but noted that sometimes such situations were impossible to avoid due to issues related to receiving and processing data.

Mr. Inderbinen made the following statement:

We join others in thanking the presenters. We broadly agree with the assessments.

We welcome the WEO’s emphasis on trade tensions, which have risen sharply in the past few months and have negatively affected business sentiment and confidence globally. A further escalation of these tensions comes with heightened policy uncertainty and could weaken growth, relative to the baseline scenario.

We tend to agree with Mr. Sigurgeirsson that resolving ongoing trade tensions would actually be the most effective stimulus to economic growth.

We also share Mr. Ray’s concern that a further escalation would likely trigger yet more accommodative policies, soaking up valuable policy space, as he puts it, that could be needed further down the road.

We are cautious on the continued encouragement of the exhaustive use of discretionary fiscal policy to support growth. Debt levels remain high, and a continued emphasis should be placed on ensuring debt sustainability. We see merit in differentiated fiscal policy advice. At the current stage of the cycle, automatic stabilizers should, as Mr. De Lannoy puts it in his gray statement, be the first line of defense.

We welcome the work on the role of fiscal policies in climate change mitigation in the Fiscal Monitor. We very much agree on the critical importance of switching from fossil fuels to cleaner energy sources. In the Swiss case, we have been an early adopter of a carbon tax, at the quite hefty price of US$96 per ton. We have tax revenue that is refunded, including on subsidies to industries that are negatively affected by climate policies, including with some of it going to improving the efficiency of buildings and R&D on clean technologies.

We also welcome that the Fiscal Monitor discusses alternative mitigation instruments, some of which we also have presently in domestic legislation. This being said, while we welcome the focus of the Fiscal Monitor on this pressing issue, we join others in asking for future Fiscal Monitors to include the developments of fiscal sustainability and debt that Mr. Gaspar outlined in his first slides, which were interesting. In Mr. Mouminah’s gray statement, the original intent of the Fiscal Monitor is laid out, and we believe it is important that this is kept. If Mr. Gaspar would like to comment on that, that would be very welcome.

We welcome the discussion in Box 1.3 of the GFSR on the transition from LIBOR, but we do associate ourselves with the remarks made earlier by Ms. Riach and her concern that the ongoing work in the Financial Stability Board (FSB) is adequately reflected in this. We will be looking forward to what staff will relate on this to the benefit of the Board.

Finally, we associate ourselves with the statement made by Mr. Rosen on the lack of coherence between the flagship reports, or the need to have a bit more coherence. On the one hand, we have the encouragement for further monetary easing in the WEO, and on the other hand, we have the financial stability implications of the lower-for-longer yield environment, as expressed in the growth-at-risk concept in the GFSR. Then we have the conclusion on the deployment of macroprudential tools. But as we know, we do not have all the tools across all sectors, and we do not have tested knowledge of the efficiency of these tools over a full financial cycle.

While the policy recommendations are clear, the relationship between the policy recommendations seems less clear, and it is unclear if and where and when the financial stability concerns impose a restriction on the continued macroeconomic and, in particular, monetary easing. If staff would like to comment on that, I would appreciate it.

Mr. Mojarrad made the following statement:

We thank staff for the excellent presentation and for the comprehensive written answers to our questions. As also indicated by a few other Directors, we feel it is important that we receive the main WEO and GFSR chapters well ahead of the Board meeting to give us sufficient time to absorb their content and to also solicit the views of our authorities.

In our gray statement, we provided comments on the three flagship documents, but I would like to stress a few points.

First, on the WEO, the world economy is on a slippery slope, and global growth is losing momentum fast. The global trade conflicts that are, regrettably, still intensifying are at the root of the policy uncertainty, waning business confidence and investment, and disruptions to the supply chains, which are all waiting on global activity. The outlook is worrisome.

Risks to multilateralism have never been so strong. Significant damage has already been inflicted on global trade and economic cooperation. What is troubling is that it is uncertain to what extent the damages are reversible, even if the trade and technology conflicts are resolved soon.

We posed this question to staff. And their view was: “A retreat from global integration—even if eventually reversed—could inhibit technology diffusion and slow global potential growth, inflicting long-lasting damage on global activity.”

Low-income countries and many middle-income countries, particularly those burdened with heavy debts, are most vulnerable in this environment of sluggish global growth and rising trade barriers. In this environment, the Fund's review of LIC facilities, including an enlargement of access, could not have been more timely.

The health of the world economy is also dependent on the stability of key industrial commodity prices, particularly oil. Sharp fluctuations in oil prices are not in the best interest of oil producers or oil consumers. Unilateral sanctions on oil exports or on some key Organization of the Petroleum Exporting Countries (OPEC) members have undermined oil stability. Oil prices also carry a large premium, reflecting geopolitical risks around the Persian Gulf.

Turning to the GFSR, like other Directors, we welcome the new format of the report, in particular, the summary of financial vulnerabilities and the report's main messages to policymakers. However, we feel that the key message of the GFSR does not fully come out—and the message is, accommodative monetary policy supports the economy in the near term but easy financial conditions over an extended period encourage financial risk taking, adding to the lingering financial vulnerabilities from the last crisis. I suggest including some wording along these lines in the Executive Summary.

Finally, on the Fiscal Monitor, we commend the Fund's work on integration and building resilience to climate change. I agree with Mr. Mouminah, that climate mitigation could focus on reducing emissions, rather than limiting fuels. In any event, a well-targeted social safety net should be put in place well before raising fuel prices through various channels.

Mr. Mouminah made the following statement:

I thank staff for their comprehensive work and responses to our questions. I also thank Ms. Gopinath, Mr. Adrian, and Mr. Gaspar for the excellent presentations. Since we issued a detailed gray statement, I will limit my remarks to the following four points.

First, we support the call to implement policies to strengthen short-term growth, boost medium-term potential output, promote resilience, and improve inclusiveness. In this context, we agree with the urgency of more active use of fiscal policy, especially in countries with available fiscal space, to complement accommodative monetary policy to help mitigate downside risks and support growth, while taking into consideration the rising debt levels described today.

Second, as noted by staff in their answers, Saudi Aramco responded rapidly to restore oil processing capacity after the drone and missile attacks on the facility. Now it is at the same pre-attack production level. The swift response and resilience show the authorities' readiness to deal with threats aimed at sabotaging the supply of energy to the global economy. Indeed, we remain committed to support the stability of the oil markets for the benefit of both producers and consumers.

Third, we feel that the Fiscal Monitor missed the opportunity to showcase staff's work during the Annual Meetings by not including an overview chapter, like what staff presented today, for example, and what was raised before by Mr. Lopetegui and Mr. Inderbinen. In this context, we echo the comments of Mr. Rosen, that the Fiscal Monitor would best serve its membership by providing a technical analysis in core areas of Fund expertise.

Ms. Levonian also flagged the absence of coverage of debt issues. While we understand the streamlining measures implemented a few years back, the sharply weakening pace of global growth requires a more agile approach.

Finally, we have expressed our detailed views on the chapter on climate change. We will not repeat them. However, it is a critical issue, and we need to be balanced between mitigation and adaptation. We would, however, like to add a few points on this.

Like Mr. Rosen and others, we are very supportive of the Fund's fiscal policy advice to members, to address vulnerabilities to extreme weather events, where they are macro-critical. This is especially relevant for small states vulnerable to large natural disasters.

Adding to that, Mr. Lopetegui and Mr. Sun raised other mitigation tools to reach the Paris Agreement goal. Specifically, I want to talk about carbon capture, use, and storage (CCUS). We took note of staff's written response. In this context, we encourage staff to consider the recent measures introduced by the Oil and Gas Climate Initiative to address climate challenges. Among the new efforts is one to spur large-scale investment in CCUS systems, with an early goal of doubling the amount of carbon currently stored globally before 2030. Indeed, CCUS is a central part of the effort to achieve net zero emissions, while reliably meeting the energy needs of billions of people in the decades to come. As mentioned by Mr. Gaspar, people in some parts of the world still do not have access to electricity.

On mitigating greenhouse gas emissions from sectors such as agriculture, forestry, and other land use, we take note of staff's written response. Here, we would encourage staff to cover these emissions in their analyses, as well as to not limit it solely to fossil fuel CO2 emissions.

The Chairman made the following statement:

Since the issue of the overview chapter came a number of times, I feel obliged to shield staff by giving you the following explanation that I was provided with.

It has been agreed that we should have an overview chapter once a year for the Spring Meetings for a simple reason: There is not much change to capture in six-month intervals. This decision has been taken in the spirit of trying to streamline our work.

We hear that many Directors miss having this chapter. We will take stock afterward on where the chips should fall on this question. I am saying that for the benefit of everybody who might want to bring that issue up so we can move on.

Ms. Mahasandana made the following statement:

We thank staff for the comprehensive reports. We also thank Ms. Gopinath, Mr. Adrian, and Mr. Gaspar for the interesting presentations. We also thank you for bringing up the Vietnam case as a good example of prioritizing social spending. My intervention will focus on three policy issues.

First, on the outlook and immediate policy priorities, we agree that the growth outlook is precarious. The drivers of the recovery under the baseline seem relatively uncertain. At the same time, risks are tilted to the downside, while policy space to respond to a shock is limited and narrowing. We encourage staff to look further into the policy tools that are available and to enhance its policy advice to member countries to avoid a downturn in the global economy.

Like many Directors, we believe the projected recovery in 2020 may be somewhat optimistic. We are particularly concerned about the trade slowdown and the longer-term damage on the structure of the global value chain and productivity, if trade tensions escalate further or remain unresolved for longer.

We agree that the immediate policy priority is to defuse trade tensions decisively. In this regard, we reiterate our support for the Fund to strengthen its role in advocating for free trade and to continue its macroeconomic analysis of trade tensions.

Second, on domestic policy, we agree that country-level policy should be rightly focused on strengthening resilience. While monetary policy can provide some support for economic activity, it may induce capital flows, volatility, and incentivize a further buildup of financial vulnerabilities, especially when debt levels are high. To avoid overburdening monetary policy and to balance between growth and financial stability, policymakers may need to consider an appropriate mix of policies, including fiscal policy, macroprudential policy, as well as exchange rate flexibility, and other targeted measures to address specific risks, such as volatile capital flows, depending on their country circumstances. The Fund's work on the Integrated Policy Framework (IPF) will be useful in this regard, and we encourage the Fund to prioritize this area.

We also stress the importance of structural reforms, even as reforms may be tough to push through. We hope to see countries prioritize reforms to strengthen resilience and boost potential growth, instead of relying on short-term measures that may have negative spillovers on others and the global economy over the long run.

Third, on international cooperation, we view that keeping one's house in order is not enough to address the challenging situation that we currently face. Domestic policy must be complemented with international cooperation. International cooperation is clearly needed in trade to resolve the current conflicts and to modernize the multilateral trading system. We also need to work cooperatively to address global spillovers, such as the issue of dollar funding facilities in the GFSR.

We agree that robust regulations and supervision, as well as international reserve holdings can mitigate the effects of the U.S. dollar funding stock but may not be enough. There is a case for a stronger global financial safety net, including a U.S. dollar swap line and appropriate lending toolkits by the Fund, such as a precautionary facility. Here, we echo Mr. Ray and look forward to having a discussion at the appropriate time.

Moreover, we also need international cooperation on global issues, such as climate change. We welcome the climate change focus in the Fiscal Monitor and the discussions on sustainable finance in the GFSR.

Mr. Bah made the following statement:

We would like to join Directors in thanking Ms. Gopinath, Mr. Adrian, and Mr. Gaspar for their comprehensive presentations. We note that the current context is quite concerning when compared with the outlook that prevailed six months ago. In fact, global activity has slowed, excess external imbalances remain, and geopolitical tensions and trade tensions have increased.

In our view, the traction of the flagship reports should be fully used to stress the need to prepare for more difficult times. In this regard, it is essential that policy recommendations be conveyed to policymakers as candidly as possible.

We would have appreciated a greater emphasis on implementing urgent and coordinated policy actions to sustain growth, while addressing vulnerabilities and building resilience. The need to achieve sustained and stronger global growth requires bold and concerted efforts from more countries.

Regarding sub-Saharan Africa, although growth has been revised downward due to the sluggish outlook in the three largest economies, the growth performance of the majority of countries should be strong, including in commodity-exporting countries that were impacted by commodity shocks in recent years. However, it is concerning to note that the projected rebound in sub-Saharan growth might not be sufficient to reverse the slowdown or even the decrease in GDP per capita. This calls for efforts aimed at stronger and more sustained growth, which should be achieved through deeper structural transformation and a greater diversification of these economies. In our view, this challenge should be better highlighted in the WEO.

On the GFSR, we broadly agree that while supportive financial conditions have contributed to reduce near-term risks to financial stability, vulnerabilities have risen, as debt of non-bank institutions and emerging and frontier markets has increased.

We also agree with the recommendation to implement sovereign debt management practices and frameworks to sustain debt dynamics and preserve debt sustainability. However, the challenges that many countries face in mobilizing the needed resources to achieve their SDGs, including through domestic resource mobilization and private investment, also need to be addressed.

Finally, we welcome the Fiscal Monitor's focus on the significant risks posed to the global economy by climate change. We agree that well-designed fiscal policies can help mitigate the harmful effects of climate change and concur that carbon taxes are the most efficient means to influence the behavior of firms and households and to facilitate a transition to cleaner and more efficient sources of energy.

We cannot stress enough the importance of international cooperation in addressing the threat of climate change. In this regard, we believe that the Paris Agreement offers an adequate framework. In addition, LICs should be supported through capacity development initiatives to help them mitigate the harmful effects of climate change.

Mr. Beblawi made the following statement:

We thank staff for the very interesting presentations and the good set of papers. I have three points to make.

First, in the GFSR, the recommendations are quite sensible, but they are quite general. We look forward to their use in bilateral surveillance, especially where the underlying analysis is based on granular country information.

Second, on the coverage of climate change, the Fiscal Monitor did a nice job of highlighting the fiscal challenges of climate change, but I wonder whether there is scope to broaden the work by linking it to growth and a further incorporation of the work into the WEO. The increase in growth in recent years was accompanied by an increase in greenhouse gas emissions. It might be useful in a future WEO to make a connection between growth and environmental degradation. Maybe we need to be more nuanced in assessing the quality of growth. Higher growth may not necessarily be good or desirable. Likewise, lower growth may not necessarily be bad.

Finally, I would like to make a clarification. In our gray statement, we emphasized the need to avoid duplicating the recommendations from one country to another in programs. Therefore, we endorse identifying binding constraints on growth, as recommended in Chapter 3 of the WEO. We call on staff to seek expert guidance on the approach followed in a specific country program and to review the extent to which structural reform conditionality is well justified.

In their written responses, the staff said they would tailor reforms based on guidance from country experts. To clarify, we also need to seek guidance from independent academic experts, like those who developed the concept of binding constraints on growth, who could review the Fund's work on program conditionality and provide a meaningful critique and guidance.

Mr. Villar made the following statement:

We thank staff for the comprehensive set of excellent reports and for the presentations on the stimulating topics.

We share the staff's more somber tone on the world economy. The Fund is the best-placed institution to be a strong voice to raise the alarm and call for toning down the escalating economic policy tensions, which are at the center of the downside risks. In this respect, we fully support the call for multilateralism, as well as the call for fiscal policy to step in and support aggregate demand in advanced economies with fiscal space, even more so in the current context of very low interest rates and relatively little space for additional easing of monetary policy.

Our main caveat to the staff's assessment has to do with the outlook of the recovery in 2020, which basically rests on the pickup of emerging countries, a scenario that we find highly uncertain.

We welcome the analysis of regional disparities in advanced economies in the analytical chapters of the WEO. For future WEOs, we look forward to the same types of analyses in emerging market and low-income economies, where reasons for regional disparities and policy implications may be quite different.

On the analysis of the structural reform agenda in EMDEs, we broadly agree with the staff's conclusions, especially on the importance of tailoring reforms to country circumstances. We highlight staff's finding that reform gains are larger where informality is initially higher because the reforms help to reduce it. Looking forward, we encourage further research on which are the reforms that help reduce informality in low income and emerging economies.

On the GFSR, we share the main messages, and I would summarize them as a timely call against complacency. In the context of very low or negative interest rates in major advanced economies for the foreseeable future, search for yields may facilitate the buildup of financial vulnerabilities. We welcome the call to tighten macroprudential policies where they exist and to develop them where they are lacking. In the case of EMDCs, we highlight the analysis on risks coming through SOEs.

We thank staff for the insightful chapter on the link between sustainable finance and financial stability. We concur with the recommendation that policymakers have a role to play in developing the standards, fostering transparency, and promoting the integration of sustainability considerations into investment and business decisions. However, we wonder what the authors suggest should be the specific roles for financial regulators and central banks.

On the Fiscal Monitor, we strongly welcome the analysis on how to mitigate climate change and on the efficiency of the alternative mitigation instruments. While we agree that fiscal instruments are the most effective means to fight climate change, we wonder how conclusive the findings are regarding the efficiency of the carbon tax, compared to other alternative instruments, like fee-based subsidies to new technologies and regulation. I personally thought that the idea of supporting new technologies was somewhat underweighted in the chapter. I also felt that mechanisms, like fee-based subsidies, could play a larger role than the one suggested in the chapter instead of these carbon taxes.

There are huge political and economic implications of carbon taxes as high as proposed in the chapter. We would very likely end up in a world with a mix of different instruments working simultaneously, in which compensation mechanisms would be very important, particularly considering their impact on income distribution.

Regarding a global international price floor, we have doubts on the arguments presented in the chapter against differentiation between emerging economies and LICs and more advanced economies. It is not only that the responsiveness to carbon prices is higher in less developed economies, which is the argument that is in the chapter. It is also the argument that our Managing Director mentioned in the town hall this morning: LICs have not contributed to climate change in the same magnitude that advanced economies have. There is no reason to ask them for equal efforts.

In any case, we share the main messages of the Fiscal Monitor. We thank staff for the work done. We support the idea that the Fund should continue helping members to fulfill their commitments to the Paris Agreement.

Finally, I want to associate myself with the proposal of Mr. Lopetegui to allow the Board for more in-depth discussions of the thematic chapters of the flagship reports. The idea of informal seminars in advance would work very well.

Mr. Ray made the following statement:

I would like to start by thanking Ms. Gopinath, Mr. Adrian, and Mr. Gaspar for the presentations. More importantly, I thank all the staff who have put an enormous amount of effort into this large set of papers.

At this time of the year, I always have sympathy for those in capitals who are trying to turn it into a three- to four-page briefing note. Colleagues have heard me on this before, so it would not surprise you that I am with Ms. Riach, that this streamlined approach to the Fiscal Monitor seems to be fine. I have just a few comments on the policy recommendations.

On fiscal policy, particularly for small open economies, such as those that I represent, we need to be cautious about fine-tuning fiscal policy, particularly—if I may talk about Mr. Fanizza's favorite topic—to estimates of things we do not even really see and do not know, like potential output. We need to be careful. As Mr. Inderbinen noted, automatic stabilizers are the first line of defense, and we need fiscal space in order to make room for automatic stabilizers. Particularly in a world where the monetary policy space has been reduced, we need to think carefully about what we use the fiscal policy space for.

On macroprudential policy, I agree with Mr. Raghani, Mr. Inderbinen, and Mr. De Lannoy that we need to be a bit careful. These are measures that are incomplete. They have not been tested across the full cycle. It is not clear if those that work on the way up will actually work on the way down, and I would just caution on that.

On financial vulnerabilities, this chair has some concerns about the way that the GFSR presents them, particularly in Figure 1.5 which shows that the Korean and Australian banks are bearing high borrower vulnerabilities scores. Our concern is that the chart could be misinterpreted, particularly by people who do not have the benefit of talking to staff, as saying something about overall banking system health. It is not doing that.

When we look at the measure of vulnerability—and staff have helped us do this—what the chart is showing is a vulnerability indicator for each sector weighed by its share of bank lending. It assumes that this is representative of banks' lending. But if I take Australia as an example, household debt is held by households that are well placed to service it. As Mr. Gaspar said, you need to look at the other side of the balance sheet. They have financial assets which are twice the size of their debts, and their net wealth is four times the size. that is one element of it.

The other point is that this is not about the resilience of the banking system, which as Mr. Adrian said, is much stronger than it was before the global financial crisis, largely because of policy response and much higher capital ratios. We need to be careful that these things cannot be misinterpreted by journalists.

On carbon pricing, the Fund needs to be cautious. This chair strongly supports work on climate change. It is existential for many of our members in this constituency, and it is macro-critical. But we need to caution against just assuming that one particular policy approach is the way to go. Governments have made commitments to the Paris Agreement, and they are going to use their own decision-making functions to decide what to do. It is not uncommon that relatively efficient policies are not chosen by politicians, and often for good reason. we need to be careful.

Lastly, just one quick reaction to Mr. Gaspar's map. It is one thing to leave off islands—although New Zealand is a pretty big island—it is another to cut one in half and leave half of it off. That does seem a bit deliberate. The island of New Guinea is being chopped in half, and one country is being left off. I do think that is something you might want to fix.

Mr. Just made the following statement:

We would like to thank the three counsellors and their teams for the comprehensive and high-quality flagship reports. The topics have been well chosen, and the overall tone is appropriately worried, without sounding alarmist. In addition to our gray statement, we would like to highlight four points.

First, the delicate global growth moment we had in April was hit by another unexpected tariff shock and a few flare ups of political tension. The major central banks administered another dose of monetary stimulus. Its marginal utility is clearly diminishing. Monetary space is vanishing. Risks may be mispriced. As rightly emphasized in the WEO and the GFSR, financial stability risks are non-trivial and, when coupled with the political push to retreat from the post-global financial crisis regulatory framework, there is more reason to be concerned. Thus, we also share the Fund's policy advice to closely monitor the balance sheets of banks and especially the sovereign-corporate debt nexus.

While we agree that macroprudential policy should be employed, that the macroprudential toolkit should be strengthened, the regulatory perimeter expanded to the non-bank financial sector, given the rising vulnerabilities, we still need to be realistic of what macroprudential policies can actually achieve and need to be aware that there could be unintended consequences, especially of untested tools.

Second, we agree with the broadly unchanged fiscal policy advice. For Europe, we appreciate the slightly more nuanced fiscal messages, as there is a cyclical component to the weakened growth outlook, for which automatic stabilizers are well suited. But Europe is also particularly exposed to the unravelling of monetary trade. Protectionism may last longer, possibly disrupting supply chains, with nonlinear growth effects. This calls for an intelligent fiscal policy fit for the purpose of promoting the structural transformation of economies.

Let me add that we highly welcome the box on the challenges facing the global automotive sector, a topic of significant importance to the authorities of our constituency. We will need advice on how to address this challenge, hopefully also in the bilateral surveillance context.

Third, we appreciate that the Fiscal Monitor highlights the key role that fiscal policy can play in mitigating climate change. This is classic Fund turf. We should now move to the next stage of more concrete policy advice or how to actually apply the nationally agreed carbon target, how to transition to a green economy, the role investment can play, and how to use the area of fiscal and regulatory policy tools, with a clear focus on the distributional considerations, practicability, and feasibility. We stress that countries' differing initial positions and political economy constraints need to be reflected. Ideally, our messages on climate change should come with a positive spin.

Fourth, like in April, the developments in the Turkish economy featured prominently throughout the flagships. We would like to highlight a few points. The Turkish economy is showing strong signs of a recovery, coupled with a sharp retreat in headline and core inflation, as well as a remarkable turnaround in external balances. These developments are also reflected in the staff's forecasts, including in the concluding statement issued after the recent Article IV mission to Turkey, where we note major upgrades across the board.

Going forward, the Turkish authorities will continue with their supportive policies, as outlined in the recently announced new economic plan, to cement the rebalancing process, as well as to uplift growth toward its potential.

Thirty years ago, on August 19, a pan-European breakfast took place close to Sopron, and the Iron Curtain between Hungary and Austria was lifted for three hours. It subsequently fell.

Madam Managing Director, you grew up behind the curtain. You have experience of what the rule of law, a market-based economy, and independent institutions can achieve. You are from a small country and know that a level playing field and a rules-based multilateral global system is particularly vital for small countries. You know what is currently at stake.

Mr. Siriwardana made the following statement:

We thank staff for the comprehensive set of documents and for responding to our questions and for the excellent presentations today. We broadly share the assessment.

Since we have issued a detailed gray statement, I wish to limit our remarks to the following points.

We welcome the staff's efforts in the WEO chapters to give a detailed analysis on the current status and risks to the global economy, along with the key policy messages that countries need to deploy fiscal measures, where fiscal space exists and where monetary space is limited. Furthermore, structural policies and governance reforms can boost output in the medium term.

Like Mr. Villar, we also note that the WEO provides a very useful analysis on subnational regional disparities in advanced economies. It would be useful if staff considered extending this work to emerging economies and LICs as well. Could staff please comment on that?

On the GFSR, we agree with the assessment of the GFSR that accommodative monetary and financial conditions have helped to mitigate near-term downside risks to global growth. However, unintended consequences of such policies are overstretched market valuations and large vulnerabilities in the global financial system.

We believe that, given the high sensitivity of EME credit spreads to global risk appetite, it is important for EMEs to build up domestic buffers to shield against a sudden tightening of global financing conditions.

We agree with the assessment that international reserves can play a stabilizing role in the event of liquidity stress in the U.S. funding markets, and thus, this aspect should be considered while considering the reserve adequacy.

We remain supportive of global cooperation and a stronger global financial safety net to preserve financial stability as a global public good.

We welcome the discussion on the macro-critical issue of climate change in the Fiscal Monitor which, without a doubt, needs enhanced international support. However, we would echo Mr. Rosen in underscoring that there should have been a chapter in the Fiscal Monitor covering the fiscal outlook and risks.

The Fund's policy analysis and advice should be more reflective of the national political economy and economic efficiency and be tailored to local conditions and resources. What is needed is a comprehensive approach which covers not only the fiscal aspects but also other aspects, including education, values, lifestyles, and development philosophies.

The Fiscal Monitor has presented an imbalanced solution of mitigation aspects only, with an uneven focus on climate actions of developing countries. Fiscal instruments, like a carbon tax, can just be one of the many tools for climate action, at best.

We missed a discussion of the financial pressures under the United Nations Framework Convention on Climate Change (UNFCCC) and Paris Agreement. To conclude, and considering the UNFCCC's principles of equity and common but differentiated responsibility, we believe that standardizing discussions on these issues is premature.

Mr. Tanaka made the following statement:

I thank all staff for the informative flagship reports. I thank Ms. Gopinath Mr. Adrian, and Mr. Gaspar for the excellent presentations.

We would attach much importance to matters related to downward pressures on global economic trends—trade tensions, imbalances, financial risks, and demographic changes. We recognize the climate change issue has become macro-critical, as raised by Mr. Gaspar.

On the WEO side, I would report that on October 1, Japan raised its consumption tax rate from 8 percent to 10 percent, with a view to expanding social spending to tackle rapid aging and demographic changes. In order to respond to that rate hike, the Japanese Government has taken measures to the fullest extent possible, including more than ¥21 billion in measures to mitigate a possible negative impact.

As for the GFSR, we should duly take note that there are growing potential risks in the financial market from the vulnerability of corporate debt and leveraged loans. In this regard, would staff point out the importance of extending macroprudential policy to the corporate sector?

I would raise a question: What degree of coverage should macroprudential policy have? In addition to the banking sector, should the policy extend to the corporate sector as a whole, as well as to the non-banking sector?

As Ms. Riach and Mr. Inderbinen pointed out, regarding the interest rate benchmark reform shown in the GFSR, Box 1.3, the staff's report is timely and useful to shed light on the importance of interest rate benchmarks reform in the financial market, but it could send the wrong message if it would say all LIBORs would be abolished and only new risk-free references would be used as single benchmarks. We request staff to fix this point before publication.

Lastly, as to the Fiscal Monitor, I am afraid to say that we would not accept publishing the analysis of our balance sheet in the Fiscal Monitor presentation paper. It would be beyond the rule. We have a concern that a misunderstanding could arise from the chart, without any detail or explanation. The U.S. situation is much worse than the Japanese. Maybe nobody would accept that. Actually, the upcoming Fiscal Monitor has no description on this matter, so it would be premature.

Mr. Mozhin made the following statement:

Many thanks to the troika for their comprehensive and highly enlightening analysis of the global developments provided to us, both in writing and now orally.

I also struggled with interpreting the word “precarious.” This word is not a part of my active English language vocabulary. What I discovered, after some effort, is that the meaning of this word is somewhere between shaky and fragile, on the one hand, and dangerous or hazardous, on the other hand. We are sending a very nuanced message to the global audience.

What is very important in the overall analysis is this distinction between immediate or short-term factors behind the growth slowdown and the more fundamental longer-term factors which are continuing to play out.

The immediate short-term factors are associated with what we call trade tensions, the overall developments in global trade, with this transition from the multilateral trading system to the system which is based on bilateral trade agreements, from the rules-based system to the deals-based system.

Regarding the longer-term fundamental factors, I believe they can best be described by the term “Japanification” of advanced economies. There are many unknowns associated with this concept, both known unknowns and unknown unknowns. But I am still not clear why we are not having hyperinflation after such a massive money printing and a massive expansion of balance sheets by all the major central banks. I do not know, what is the role played by the so-called zombie companies? Are they leaving debt behind these deflationary pressures? Or maybe this is linked to the way we measure inflation. We focus on the CPI context, while when we look at other manifestations of inflation, we see massive asset price inflation. We see very significant inflation in housing prices, in health care, especially elite health care, and education prices. This is a question which I would want to look at. What is the right way to measure inflation?

My final point is on the fiscal space concept. Although I do not disagree that, in a case where things become desperate, the coordinated fiscal effort perhaps would be the only way to address the global situation, but I would like to make one point. It took Germany a whole decade to reduce its public debt from about 85 percent to around 60 percent of GDP. This was during a decade when interest rates were very low and growth in Germany was reasonably high. I would want to see some more examples like this in the Fiscal Monitor next time.

Mr. Rosen made the following statement:

We thank staff for the papers and the excellent presentations. We appreciate the emphasis on identifying policy space and policy solutions to boost slowing growth. It is with this focus that the Fund can add value.

We would echo Mr. De Lannoy that headwinds can be turned into tailwinds with the right policy actions.

We see subdued domestic demand in major economies as an important reason for the overall growth slowdown. Countries with a weaker outlook need to adopt more supportive macroeconomic policies, particularly fiscal policy, alongside major structural reforms, to reignite strong growth. In this regard, we would like to see staff broaden their work on the IPF to cover fiscal, as well as monetary, macro- and microprudential policies. We are concerned about a potential overemphasis generally on monetary and macroprudential policies and insufficient attention to both the role of fiscal policy and prudential oversight of individual financial institutions.

On trade tensions, we emphasize that our goal is trade that is both free and fair. Many today have mentioned multilateral solutions and the WTO. But the WTO has over many years been unable to adequately deal with the many problems stemming from unfair trade practices. Together with others—and Ms. Levonian today—we are calling for WTO reforms. As a result of these issues at the WTO, we have been obliged to take action to seek to resolve these serious trade issues ourselves, while at the same time, encouraging cooperation from willing trade partners. We believe the ultimate outcome of these actions will lead to trade agreements that will produce freer and fairer global trade, and this will benefit all countries.

We appreciate the recognition in the WEO that staff may be underestimating potential growth and output gaps. We join others in calling for further work to ensure that Fund policy advice promotes policies that better support growth-promoting measures to close growth and output gaps. We hope a renewed focus on how the ways to accelerate growth will be incorporated into bilateral surveillance.

We would also like to echo Ms. Riach's point on LIBOR in the GFSR, as our authorities have the same concerns. We welcome that staff is now making adjustments to the text.

We fully agree with the messages on debt sustainability and transparency in the WEO, including on the need for more transparency and better monitoring of SOE debt and less reliance on collateralized debt. We join Ms. Levonian in encouraging non-Paris Club official creditors to adopt sustainable lending rules, such as those advocated by the G20, and to consider joining the Paris Club to enhance creditor information sharing and coordination.

Finally, we echo Mr. Mahlinza in calling for sustained Fund technical support to strengthen debt management practices.

The Economic Counsellor and Director of the Research Department (Ms. Gopinath), in response to further questions and comments from Executive Directors, made the following additional statement:

Let me focus on a few of the remarks that came up often. One was about our outlook and some concern that maybe our baseline is somewhat optimistic, especially the pickup in 2020. This is actually consistent with the way we have tried to present the outlook, which is that it seems to be the case that there is sluggish growth and the recovery is certainly precarious.

The reason for optimism otherwise would be that, if you look at labor market outcomes, consumer spending, consumer confidence, those continue to hold up. That can change, but those continue to hold up. That gives you reason not to expect that something very dramatic will happen.

On what we are seeing in terms of the high-frequency indicators, very recently, it does appear that for advanced economies, some of the recoveries are not happening. But it is being offset a bit by EMDEs, where we are getting slightly better news. We just have to wait and see.

On the question that came up about the trade tensions leading to permanent effects, that issue is addressed in Chapter 1 of the WEO, where we find there is a long-run effect of about 0.3 percent on world GDP. A part of that comes from lower productivity because of a misallocation of resources when one starts putting up trade barriers.

We need to go into this in greater detail. The problem is data, because data on global supply chains come with a lag. The truth is, we really do not know how much things have changed in the global trading system at this point. But it is fair to say that if this continues, these could have longer-lasting effects.

On the policy front, there was a question of what could be done. The bottom line is before we start throwing out monetary policy or fiscal policy or structural reforms, it would help if there was a de-escalation of trade tensions. I appreciate Mr. Rosen's words, that these could actually be tailwinds, if things worked out, and we completely agree with that.

In the event that does not happen or it takes longer to happen, then the other policies have to play a role. On the monetary policy, a question came up about whether the WEO and GFSR were being a bit inconsistent. I believe we were consistent. We both agree that there is a role for accommodative monetary policy to support economic activity. That was certainly needed. Especially with inflation expectations showing some risk of a de-anchoring, that made a lot of sense. But the way monetary policy works is to encourage more risk taking, by definition. That is how it works. We are concerned about whether there is excessive risk taking that will happen, and that is what Mr. Adrian flagged.

I share your skepticism that while we all would like to think macroprudential policies would work beautifully and will fix all the problems, that might not be the case, but this is a tradeoff that one has to live with. If you want to completely remove all risk, maybe we should have no monetary policy stimulus, but that would be a bad outcome as well.

On the fiscal policy space, the point remains that, yes, there are countries where one could use fiscal policy. I also want to say that this is not just about using fiscal policy to close output gaps. This is from a cyclical perspective. There are countries that were able to borrow at negative interest rates. From a pure cost-benefit analysis, you could make an argument for why you would undertake projects and investment projects now in a favorable environment.

There was a mix. Some thought that maybe we should be doing more on the fiscal front, others thought we should be doing less on the fiscal front. There is a tradeoff, which is that financial conditions are quite easy at this point. That could change quickly, and you saw this over the last few days. Markets can move very quickly, so one has to be careful about it.

On the question on inflation and where it is coming, we continue to explore that. If anything, inflation is de-anchoring at this point, as opposed to shoring up.

I will just end with the things to do. On the work on climate change, staff is doing a significant amount of work across departments. In 2020, we will have a chapter on climate change in the WEO, but there is a lot of work being done on mitigation, adaptation risks, and many other factors. We would love to do regional disparities in emerging markets and LICs. In this particular chapter, we would have loved to do it, but the problem is data. We just do not have the data to do it at this point. We hope this will change.

We are going to have an informal discussion about the IPF on Monday, so we will go into some of the points that were raised. It does not include fiscal at this point, but that is certainly on the list of things to do.

The Financial Counsellor and Director of the Monetary and Capital Markets Department (Mr. Adrian), in response to further questions and comments from Executive Directors, made the following additional statement:

I am happy that many Directors commented that they like the new format of the GFSR. It is a minor tweak. We renamed the former sections of Chapter 1 into chapters, so we have more chapters and less sections, but it is somehow more digestible.

I would like to point out that the overall length of the GFSR keeps shrinking. Our GFSR this time is shorter than last time. Last time, it was shorter than the time before. We are very conscientious about resource constraints and making the right tradeoffs.

On the key messages, Mr. Mojarrad was wondering whether the key message came out clearly. I just want to read the first sentence of paragraph 2 in the summary: “Accommodative monetary policy supports the economy in the near term, but easy financial conditions encourage financial risk taking and may fuel a further buildup of vulnerabilities in some sectors and countries.” This is very much in line with what Ms. Gopinath just said, and we are very much aligned.

The baseline policy advice is that we are in favor of accommodative monetary policy to ease short-term downside risks and to boost demand, but it comes with a buildup of risk. Mr. Villar’s comment, that this is “a timely call against complacency" in terms of macroprudential policies, is the right one. There is a need to step up on macroprudential policies. Vulnerabilities are at a very high level in the non-financial sector and are building in the corporate sector. The problem is that we do not necessarily have all the tools available here, so we urge authorities to work on those tools.

For example, in some jurisdictions, there has been supervisory guidance on leveraged loans that are underwritten at the banks that are sold into the marketplace, where basically the guidance makes sure that what is sold into the marketplace still has fairly conservative underwriting standards. This is an example of the kind of macroprudential tool that can be useful in the corporate sector and that has an impact on the whole marketplace, not only on the banks.

The banks are much safer today, so we are not worried as much about systemic banking crises today, but we do worry that underwriting standards in the corporate sector are deteriorating, that leverage is increasing, and that it is important to develop macroprudential tools. France, as well, has developed certain macroprudential tools for the corporate sector. More jurisdictions should be actively working on that.

Some of our advice is somewhat general, as Mr. Beblawi mentioned. That is the nature of the GFSR and the WEO and the flagship reports, in general. These have somewhat general advice. But in the FSAPs and Article IV reports, we go into great depth in terms of policy advice.

As Ms. Gopinath already pointed out, some Directors have expressed skepticism about the ability of macroprudential tools to contain vulnerabilities. We have a 2015 paper on the relationship between monetary policy and financial stability, and our first-order advice remains that macroprudential policy should be the first line of defense. Of course, if it is not effective, then you would have to think about what the implication is for monetary policy.

As Ms. Gopinath points out, on Monday, we will have an informal briefing on the IPF. Part of the IPF is to have a quantitative assessment of the buildup of vulnerabilities within models that allow for alternative policy paths on macroprudential policy, monetary policy, and foreign exchange interventions so that you can quantify these tradeoffs and have an informed discussion.

As Ms. Mahasandana points out, this is also a question with respect to the capital flows that are associated with domestic risk-taking and where prudential policies are the first policy tool of defense, the first line of defense. The effectiveness is something that we are certainly looking at in an ongoing manner.

The easy financial conditions lead to stretched valuations, to some degree. The question was asked, why it was that high-yield bonds were more compressed than investment-grade bonds. This is consistent. When you look at the relative compression of spreads, high-yield bonds tend to be more compressed than investment-grade bonds. In fact, today there are some high-yield bonds in the world that have negative interest rates, which is quite amazing. These are high-yield bonds with negative interest rates.

In our asset valuation assessment, there is relatively more risk taking in more risky assets. We consistently see that riskier assets are relatively more overvalued. That is a cause for concern, which is why we call for more macro-financial policy and for building buffers now.

In terms of the U.S. dollar funding chapter, we fully agree with what many Directors have said, that funding fragilities in international capital flows call for a better safety net. In fact, we show in the chapter that U.S. dollar swap lines are one policy tool that is counteracting these international funding fragilities. We did not have enough data to evaluate whether Flexible Credit Lines (FCLs) are a tool quantitatively. But a priori, yes. That is exactly the direction in which we would be thinking that global financial stability can be made safe, with respect to international funding flows and funding risks, in terms of the international safety net.

We are happy that many Directors endorsed the chapter on ESG. Let me just point out that we are working on an analytical chapter for the spring, where we look at the pricing of climate risk and whether climate risk is appropriately priced. A priori, it is not going to be appropriately priced. Then the policy question is what to do about it.

We have been doing climate stress-testing within certain FSAPs. For example, most recently in The Bahamas, we did climate stress testing just before the hurricane hit. We also organized a panel at the Annual Meetings on climate. The Managing Director will be one of the lead speakers there.

Many Directors commented on the box on reference rates. We have worked very closely with your staff, in particular, from the U.K. office, the

U.S. office, and others, to completely rewrite that box. We have taken those comments into account, and we would thank your staff for working with us.

The Director of the Fiscal Affairs Department (Mr. Gaspar), in response to further questions and comments from Executive Directors, made the following additional statement:

I thank Directors for all the comments on fiscal policy and for engaging in this in-depth discussion on some aspects of our fiscal policy. That shows that the Board can engage on these policy-relevant issues, even without a devoted conjunctural chapter in the Fiscal Monitor.

We have been engaging with colleagues from other departments, including area departments. Our ability to discuss, fine-tune advice, and communicate on fiscal matters is undiminished, which is something that will feed into the reflections that we will have with the Managing Director.

I did take note of many good suggestions that we intend to take up in the spring conjunctural chapter of the Fiscal Monitor. I can reassure all that the issue of thinking systematically about public debt in the context of the assets and liabilities of public sectors and thinking about public debt risks, strictly understood and broadly understood, is at the center of our agenda. I expect to make progress from now until the spring.

Differentiated advice on fiscal policy was stressed by many. Indeed, I tried to emphasize the differentiation in my presentation. I believe that is crucial.

I would like to refer to Mr. Villar's intervention, where he specifically used the expression, "a timely call against complacency," recommending it to Mr. Adrian. If he does not mind, I will take the recommendation for myself as well.

My friend Mr. Tanaka suggests that we do not publish this slide, comparing Japan and the United States. This slide is not intended for publication at all. I should signal that there is a working paper in the pipeline that will look at public sector balance sheet information for all of the G7, where the methodology will be presented, and no bilateral comparison will be made.

I appreciate the support for the work that staff has been conducting on climate change. The word "differentiated" was used. I completely agree. The chapter in the Fiscal Monitor very much emphasizes differentiation, the substitutability across instruments, some elements of complementarity across instruments. There are some aspects that have to do with growth strategies that we do not cover much, but that is acknowledged in the chapter.

On the integration of climate change and surveillance, we have a "how to do" note that will help country teams integrate that work. We expect that to be available in early 2020, and I believe that is very much in line with what you suggested.

There was a very important question that Mr. de Villeroché asked about our engagement on capacity development in LICs. There were some remarks about capacity development for LICs in the area of climate change. We are engaged in all of these dimensions.

The following summing up was issued:

Executive Directors broadly shared the assessment of global economic prospects and risks. They observed that global growth in 2019 is expected to slow to its lowest level since the global financial crisis, reflecting a broad-based weakening of industrial output and business confidence amid rising trade tensions. While growth is expected to pick up modestly in 2020, the outlook is precariously hinged on a turnaround in a small number of countries that are currently underperforming or under stress. Meanwhile, overall growth in low-income developing countries continues to be relatively resilient, although prospects for convergence toward advanced economy income levels remain challenging.

Directors noted with concern that the global economy faces increased downside risks. Most notable in the near term are intensifying trade, technology, and geopolitical tensions with associated increases in policy uncertainty. Directors also pointed to the risk of an abrupt tightening of financial conditions that could be triggered by a range of events. They noted that downside risks remain elevated in the medium term, reflecting increased trade barriers, a further accumulation of financial vulnerabilities, and the consequences of unmitigated climate change.

Given these risks, Directors stressed the need to enhance multilateral cooperation, with most considering it a priority to de-escalate trade tensions, roll back the recent tariff increases, and resolve trade disagreements cooperatively. Directors also urged policymakers to limit greenhouse gas emissions and reduce global imbalances. Closer multilateral cooperation on international taxation and global financial regulatory reforms would help address vulnerabilities and broaden the gains from economic integration.

Directors underscored the urgency of deploying policies proactively to secure growth and enhance resilience. They supported the more accommodative monetary policy stance in many economies while emphasizing the continued importance of remaining data-dependent and clearly communicating policy decisions. Directors noted that the very low interest rates have expanded fiscal resources in many countries. They broadly agreed that, where fiscal space exists and debt is sustainable, high-quality fiscal policy should be used to support aggregate demand where needed. Ensuring debt sustainability requires rebuilding buffers in countries with relatively weaker fiscal positions, although the pace could be calibrated as market conditions permit to avoid prolonged economic weakness and disinflationary dynamics. If downside risks materialize, policymakers should stand ready to implement a contingent, and possibly coordinated, response.

Directors emphasized the importance of growth-enhancing structural reforms in all economies. The priority is to raise medium-term growth, improve inclusiveness, and strengthen resilience. Structural policies can help ease adjustment to shocks and boost output over the medium term, narrow within-country income differences, and encourage faster convergence across countries. Many countries should continue to strengthen institutions, governance, and policy frameworks to bolster resilience and growth prospects.

Directors noted that the prolonged low interest rate environment in advanced economies has encouraged risk-taking including among institutional investors, and led to a continued build-up in financial vulnerabilities. These include rising risks in non-bank financial institutions, mounting corporate debt burdens, and a growing reliance on external borrowing by emerging and frontier market economies. Directors highlighted the urgent need to safeguard financial stability through stronger and broader macroprudential policies, and address corporate vulnerabilities with stricter supervision and oversight. They also supported the call for strengthened oversight and disclosures of institutional investors and prudent sovereign debt management practices and frameworks, as well as a closer monitoring of U.S. dollar funding fragility. Directors reiterated their call for the full implementation of the global regulatory reform agenda.

Directors noted that emerging market and developing economies need to implement an appropriate mix of fiscal, monetary, exchange rate, and macroprudential policies. Ensuring financial resilience is a priority in emerging and frontier markets that are vulnerable to abrupt reversals of capital flows.

Directors urged low-income developing economies to adopt policies aimed at lifting potential growth, improving inclusiveness, and combating challenges that hinder progress toward the 2030 Sustainable Development Goals. Priorities include strengthening monetary and macroprudential policy frameworks and tackling debt vulnerabilities. Directors emphasized the need for fiscal policy to be in line with debt sustainability and progress toward development goals, importantly through building tax capacity while protecting the vulnerable. Complementarity between domestic revenues, official assistance, and private financing is essential for success, while investing in disaster readiness and climate-smart infrastructure will also be important. Countries need to improve education quality, narrow infrastructure gaps, enhance financial inclusion, and boost private investment. Commodity exporters should continue diversifying their economies.

Directors broadly welcomed the focus of the Fiscal Monitor on climate change. Most Directors concurred that carbon taxation, or similar pricing approaches such as emissions trading systems, is an effective tool for reducing emissions. Depending on country circumstances and preferences, other approaches, such as feebates and regulations, are also worth considering. Directors noted that, for climate change mitigation policies to be widely acceptable, they should be part of a comprehensive strategy that includes productive and equitable use of revenues, a social safety net for vulnerable groups, and supportive measures for clean technology investment. While many Directors noted that an international carbon price floor could help scale up mitigation efforts, further work and greater collaboration at the global level would be necessary to reach a broad-based agreement on a fair burden-sharing basis. Many Directors took the opportunity to welcome the Fund’s work on analyzing mitigation policy options and integrating such analysis into its surveillance activity, leveraging the expertise within its mandate. Most Directors welcomed the attention paid to sustainable finance that embraces environmental, social, and governance considerations in investment decisions, and emphasized the importance of continued cooperation with other international organizations.

APPROVAL: March 21, 2023

CEDA OGADA
Secretary

Annex

The staff circulated the following written answers, in response to technical and factual questions from Executive Directors, prior to the Executive Board meeting:

World Economic Outlook

WEO Chapter 1 Global Prospects and Policies

1. ***Two important open questions at this stage are whether the underlying factors behind the industrial sector slowdown are temporary or more permanent, and whether this slowdown will spill over to the service sector and to households' confidence. Staff elaboration are welcome.***

- The industrial sector slowdown can be attributed to three broad categories of drivers. First, temporary factors which should reverse as strains ease and confidence improves in the affected economies --- e.g, countries in deep stress, as well as the slowdown in investment in India. Similarly, some supply-side factors that have disrupted industrial sector activity – e.g. regulatory changes on auto emissions, notably in the euro area, China – are expected to dissipate as firms adjust production lines to the new standards. Second, there are factors that appear temporary for now but could turn out to be more persistent depending on the outcome of difficult negotiations. This includes firms holding back on capital expenditures in the presence of rising trade barriers and protracted uncertainty on Brexit. The third category is that of more persistent drivers. Slower investment in China, consistent with the transition to more sustainable pace of growth, is a key structural factor that is likely to continue weighing on global industrial output growth even as temporary factors wane.
- So far, services activity has been broadly resilient even as manufacturing has been weak over the past 12 months. However, there are some signs in survey data of decelerating service sector activity. New services orders, for example, have weakened in the euro area and United States. As the chapter elaborates, whether manufacturing weakness spills over more broadly into the service sector will depend on how the labor market and consumption hold up.

2. ***We support staff's call for a rebalancing of the policy mix toward a more active use of fiscal policy. In the face of limited room for further monetary easing, fiscal policy will need to play a greater role to support growth and inflation, first and foremost in countries with ample fiscal buffers. More broadly, the significant compression of long-term interest rates has raised fiscal space in most advanced economies, which reinforces the case for a stronger public investment. Going forward, staff should pay greater attention to the timing, composition, scale and duration of potential fiscal stimulus trying to draw lessons from past episodes. Does***

staff already have some recommendations on these issues, as well as on the best governance arrangements to design and implement such plans?

- Staff will address this issue at the Board Meeting

3. ***While attention needs to be paid to debt sustainability concerns, we concur with staff that it is key to find fiscal space for the necessary investments to support progress toward the SDGs and to protect the most vulnerable. The IMF is a key partner for the capacity development of these countries and we expect staff to further strengthen its technical assistance in LICs, notably through close cooperation with the World Bank. Could staff reflect on the next steps concerning the strengthening of its capacity development activities with LICs?***

- Staff defer this to the next Board briefing on capacity development activities.

4. ***The box on the plucking theory provides an interesting explanation to the "missing inflation puzzle": it suggests the output gap is more negative than estimated. As mentioned above, we think global disinflationary pressures are mostly related to structural changes. We note that the inflation rate has a bad track record as a signal for the output gap in the euro area, while other cyclical indicators currently suggest a closed output gap (Buti et al. 2019)[1]. We also note that staff tended to overestimate output gaps for Europe in real time between 1994-2017 (Kangur et al. 2019).[2] This suggests a tendency to look for cyclical explanations for structural weaknesses. Misdiagnosing a slowdown in potential output growth as weak demand may lead to misguided policy advice (see e.g. Bakker, 2019)[3]. We stress the importance of considering structural explanations for the current inflation outlook. Is staff also exploring structural explanations for the current environment of low interest rates and low inflation?***

- The WEO will continue examining these issues, building on past work that has studied the decline in interest rates and persistently low inflation (April 2014; October 2016; October 2017; Box 1.2, April 2018).

5. ***In Box 1.4, the implications of the so call "plucking theory" need to be properly addressed by the Fund, particularly as current estimation techniques may significantly underestimate potential output and affect the quality of Fund surveillance and programs. We therefore concur with staff that more research is warranted to enhance measurement of potential output. Here, we invite staff to provide more clarification of the planned Fund work to advance technical capabilities to accurately estimate potential output.***

- Staff is regularly involved in projects to improve estimates of potential output. Recent tools have incorporated the role of financial variables and future work could try to better capture the business cycle asymmetries described in the Box on the "Plucking Theory".

6. ***The 2019 and 2020 growth forecasts for the United States, on the other hand, have been revised upwards from the April WEO. We note staff's assessment that this outturn reflects the recently adopted two-year budget deal and the Federal Reserve's policy rate cuts, which helped offset the negative effects driven by factors including trade-related uncertainties. Facing external pressures including a global slowdown and fading effects of the 2017 Tax Cuts and Jobs Act, to what extent can the recent stimulus sustain economic momentum in the US?***

- The baseline forecast is for US growth to slow from 2.4 percent this year to 2.1 percent in 2020. The GDP data through the second quarter and high frequency data through August are consistent with the baseline forecast, even as manufacturing activity has weakened and business investment remains sluggish. Growth relies to an important extent on consumer spending remaining resilient. Continued robust consumer spending would support services activity and ensure that service sector firms continue to expand employment (which, in turn, would support consumer confidence). Staff's view is that this dynamic is likely to continue with financial conditions having turned even more accommodative since the spring.

7. ***Low for long interest rates contribute to the buildup of vulnerabilities and medium-term financial stability risks, which may negatively affect growth and inflation in the medium-term. It is therefore relevant for central banks to take the effects of accommodative policies on financial vulnerabilities into account. The Fund should step up its efforts to increase its understanding on how to incorporate financial stability considerations in monetary policy frameworks. Can staff confirm that this is part of the work on the Integrated Policy Framework?***

- Staff will address this issue at the Board Meeting.

8. ***Inflation remains muted, with core inflation sliding further below target across AEs and below historical averages in many EMDEs. Despite higher import tariffs, cost pressures remain largely subdued in some countries. Besides compression of firms' profit margins, are there other reasons behind the absence of pass through to inflation?***

- Past analysis in the WEO (Box 1.2 of the April 2018 WEO, Chapter 2 of the October 2016 WEO) discussed various possible drivers of muted inflation pressures, including: underestimation of slack; downward shifts in inflation expectations of firms following persistent undershooting of inflation targets; an increasing range of products, services, and tasks traded across countries leading to competition placing a lid on the relative prices and inflation rates of tradable products; as well as the threat of production relocation may have made inflation more responsive to foreign factors, including foreign demand and slack.

9. ***Staff also pointed out that the labor share of income has been on a gentle upward trend since around 2014 in Japan, the United States, and the United Kingdom. What have been the drivers behind the upward trend in labor share of income since 2014? We believe this is an area that warrants further analysis by staff.***

- The labor market has performed well in these economies since 2014, with unemployment rates approaching record lows. Employment gains and modest wage increases have contributed to the increase in the labor share of income since 2014 in these countries.

10. ***The outlook for advanced economies has broadly remained the same, projecting a broad-based softening in growth this year and next. The US economy maintained its strength in the first half of the year - possibly above its potential – reflecting buoyant employment and private consumption. We agree that the renewed monetary easing cycle will buttress economic activity in the US. However, we see a risk that growth could slow down more rapidly in 2020 amid elevated policy uncertainty and a weaker investment outlook. If that risk were to materialize, would staff see a possibility that the phasing-out of the 2017 Tax Cuts and Jobs Act be postponed?***

- Staff will address this issue at the Board Meeting

11. ***We note the recent spike in the oil price. If the increase is sustained, it could further weigh on the global economy at a critical moment. Could staff elaborate on the scenario of a sustained oil price rise?***

- The recent oil spike was caused by drone and missiles attacks on the Saudi oil processing facilities, at Abqaiq, which took about 5.7 mb/d off the market (almost 6 percent of global oil production). After a 15 percent increase on the trading day after the September 14 attack, oil prices retrenched somewhat as geopolitical tensions eased, ARAMCO responded rapidly to restore processing capacity, and the outlook for global oil demand remained weak. WEO projections assume oil prices at $61.8 a barrel in 2019 and $57.9 a barrel – based on future prices a few days after the attacks. Currently, near-term futures suggest that oil prices will be slightly lower than those assumed in the WEO. While there are upside risks to oil prices in the short term, for the medium-term risks are balanced.

12. ***The recovery in 2020 basically rests on the pick-up of emerging countries, for which the scenario is highly uncertain; could staff comment on the specific risks that emerging economies face in the short and medium term? Do staff's growth projections in the medium term for advanced economies take into consideration the higher financial vulnerabilities given the current low-rate environment (as presented in the GFSR)?***

- As discussed in WEO Chapter 1, the specific risks that emerging market economies face are abrupt declines in risk appetite (triggered for example by rising trade tensions, no-deal Brexit, sharper-than-expected slowdown in China), intensifying geopolitical tensions with repercussions for commodity prices, civil strife and conflict in some cases, climate change and associated consequences for health, environment, and livelihoods. Staff's analysis of the global outlook and risks takes into consideration a possible further build-up of financial vulnerabilities given the low-interest rate environment (which is one of the main factors underlying the assessment of downside risks to the outlook).

13. ***Notwithstanding the necessary focus of the WEO on the materializing trade and geopolitical risks, we missed more emphasis on the challenge of inclusion as well as inequality, which are strongly linked to democratic shifts and the current policy uncertainty. We would welcome staff's comments and further development of these topics in future WEOs.***

- Inclusive growth and inequality are key topics that staff will continue to follow in future WEOs.

14. ***On external sector outlook, it observes that global current account deficits and surpluses are projected to gradually narrow in 2019 and subsequent years. Similarly, it notes that creditor and debtor positions as a share of world GDP are projected to widen slightly this year, and then to stabilize as a share of world GDP over the forecast horizon. However, subsequently it is mentioned that over the medium term, widening debtor positions in key economies could constrain global growth and possibly result in sharp and disruptive currency and asset price adjustments. Staff may like to elaborate on this assessment.***

- The baseline projection is for overall creditor and debtor positions as a share of world GDP to widen slightly this year and to broadly stabilize thereafter as a share of world GDP (this however masks offsetting compositional changes within the creditor and debtor groups). Nonetheless, there is a risk that sustained excess deficits in key economies could give rise to disruptive adjustments that undermine global financial stability and growth.

15. ***As regards the forecasts for Indian growth, we note that these have been lowered significantly for 2019 and marginally for 2020. Slower growth in the first quarter appears to have influenced staff assessment, and it does not seem to have factored in strong policy steps taken by the government to revive the growth scenario. Several steps which inter alia include, monetary easing, resolution of NBFC liquidity stress, banks recapitalization and reduction in corporate income tax are expected to boost the investment as well as consumption considerably. Accordingly, GDP growth for 2019 as well 2020 is expected to be higher than the staff estimates. Staff may like to comment?***

- The staff forecast assumes a strong rebound in the second half of India's current fiscal year (October-March) and into next fiscal year. This reflects the lagged effects of monetary policy easing, a reduction of corporate income tax rates, recent measures to address corporate and environmental regulatory uncertainty, and government programs to support rural consumption. The government has also taken steps to support specific sectors that have been especially weak—such as autos, real estate, MSMEs (micro, small, medium enterprises), and exports—along with nonbank financial companies (NBFCs), and has front-loaded the recap of public sector banks (PSBs). The staff's forecast for the next two FYs is at or slightly above the current consensus forecast.

16. ***In the context of the international growing tensions, it would not be appropriate to treat "trade" and "technology" in parallel. While trade tensions are by nature negative and should be minimized as possible, the restrictions on the flow of technology are different in that there is an acceptable type of restriction such as one for national security purposes. If staff think it is necessary to say something about the restrictions on the flow for any reasons, please elaborate on what type of restriction it should be.***

- Staff will address this issue at the Board Meeting.

17. ***We query the treatment of Brexit in the WEO. We acknowledge that the forecasts are based on the UK government's stated aim to agree to a deal to withdraw from the EU, but we view the treatment of the risks of a no-deal Brexit, by October 31, as too light. The likelihood of no-deal Brexit has clearly increased significantly since the last WEO, and it is unclear if the range of risks from different Brexit outcomes is fully factored-in, including but not limited to impacts on European industrial output through value chain disruption under a no-deal Brexit. Does staff's prior assessment of the impacts of a no-deal Brexit from Scenario Box 1 of the April 2019 WEO continue to adequately capture the spillovers involved, including on European value chains?***

- In staff's assessment, the scenarios still represent a good estimate of the possible short-term effects of a no deal Brexit on the EU as a whole. Both sides have made further preparations for a no deal since the spring, so the risks have been mitigated somewhat. Nonetheless, significant uncertainty remains on what policies both sides would adopt to manage initial disruptions. Thus, a wide range of economic scenarios could materialize in the short run.

18. ***We welcome a further elaboration of the role of the economic performance of the emerging and developing Asia in supporting the 2020 recovery. How would the growth projection for 2020 look like, should the rebound in the stressed economies be weaker than expected or should economic activities in the emerging and developing Asia slow down due to intensified trade tension? We also welcome staff's comments on the policy advice under such a scenario.***

- The projected recovery in 2020 (0.4 percentage point pickup in global growth) is almost entirely accounted for by anticipated pickups in three groups of economies (i) those currently under severe stress (such as Argentina, Venezuela, Iran) where strains are anticipated to ease (ii) those that are growing below past averages and are expected to return toward historical growth rates (such as Brazil, Mexico, Russia) and (iii) India, currently experiencing a sharp slowdown in domestic demand and projected to strengthen next year. If these projected recoveries – in some cases less severe contractions next year compared to 2019 – fail to materialize as anticipated, this may entail trade and financial spillovers to other economies beyond those directly affected and global growth is likely to disappoint relative to the baseline. Depending on available monetary and fiscal policy space, and if market conditions permit, in countries where growth decelerates sharply, macroeconomic policies will need to become more accommodative.

19. ***We encourage the Fund to continue to advocate for a swift resolution of trade tensions, supported by objective and rigorous analysis of their macroeconomic impact. In this regard, we welcome staff's comments on the plans for further research in this area, and whether there are plans to look deeper at the impact of trade tensions on technological diffusion.***

- Past WEO analysis (e.g. Chapter 4 of the April 2018 WEO) found that closer global integration of economies has increased the spread of knowledge and technology across countries. Scenario Box 1 of the current WEO examines the implications of advanced economies reshoring production. The WEO will continue to follow these issues closely, as a retreat from global integration could inhibit technology diffusion and slow global potential growth.

20. ***We note that the outlook is subject to significant risks, including the failure of key EMDEs to recover from severe strain, worsening geopolitical and technology tensions, a no-deal Brexit, and a further escalation of trade tensions and associated increases in policy uncertainty. In addition, the deterioration in financial market sentiment remains a major risk for vulnerable economies, as is the risk of adverse climate events. At the same time, staff's latest estimation of the probability of a 1-year ahead global economic downturn shows a higher probability than estimated during the Spring 2019 (figure 1.23). Against this backdrop, we agree that the global outlook remains precarious, with a likelihood that global growth may underperform going forward. Consequently, we are of the view that staff forecast for global growth in 2020 may be overly optimistic. Staff comments are welcome.***

- Please see answer to Question 18.

21. ***We thank staff for the analysis in Scenario Box 1 on the implications of advanced economies reshoring production. We agree that in the event these developments materialized, the outcome would be a less open global economy that could constrain technology diffusion and cause global activity to fall further. Staff comments on the policies that should be undertaken by EMDEs, especially commodity-dependent economies, that are trying to diversify their economies to better fit into the global value chains, would be appreciated.***

- Economic diversification away from excessive dependence on commodities, or on a few sectors such as agriculture or tourism, is an overarching goal for commodity exporters and those countries that are particularly exposed to natural disasters. While there is no unique template for all circumstances, general policy attributes that facilitate diversification or help countries cope with climate shocks include sound macro management and judicious use of policy buffers to smooth fluctuations, investment in education and training to improve workforce skills, increased access to credit, and a reduction in infrastructure gaps (see Chapter 3 of the October 2017 WEO and the October 2017 Regional Economic Outlook for sub-Saharan Africa). More broadly, governance reforms—for instance, strengthening incentives to improve the efficiency of public administration, reducing the risk of expropriation, enhancing transparency in project selection, and expediting business dispute resolutions according to established legal principles—would help lift private investment, create jobs, and expand the range of activity beyond primary, resource-based sectors.

22. ***We underscore the need for collaborative efforts to reduce trade tensions, and cooperatively strengthen and modernize the rules-based multilateral trading system. While there may be some merit in the suggestion to allow countries that wish to move further and faster in WTO trade negotiations to do so, we wonder whether***

such a framework would allow for the concerns of slow movers to be addressed at a later date. Staff comments are welcome.

- Yes, staff believe that the framework for WTO-based plurilateral agreements does indeed allow for the concerns of "slow movers" to be addressed. The first-best approach is for a fully multilateral basis (i.e., among all WTO members). Where a fully multilateral agreement is not possible, however, countries often pursue bilateral or regional trade agreements; these can be beneficial in many respects, but typically provide no avenue for non-participating countries to help to shape the agreement, nor to join the agreement. WTO-based plurilateral agreements provide such avenues. (Please see also the Executive Summary in the joint IMF-WB-WTO 2018 paper *Reinvigorating Trade and Inclusive Growth*.)

23. ***The world economy is on a slippery track, global growth is losing momentum fast, and the economic downturn is broadening geographically. The US-China trade and technology conflict has escalated markedly since the April 2019 WEO, continuing to exact a heavy toll on the global economy through generalized policy uncertainty and weakening business confidence, as well as due to negative repercussions on financial market sentiment. These developments are adding pressure to the cyclical downturn already in train. The geopolitical tensions and the intensification of US sanctions on Iran and conflicts in some oil-producing regions are pressuring the oil market and weighing on the global economy. The global economic growth is the weakest it has been since the global financial crisis, global trade growth has come to a virtual standstill, and global supply chains have been disrupted. Risks to multilateralism and resort to inward-looking policies have never been so strong in the past few decades. It is uncertain to what extent the damages are reversible and confidence could be fully restored even if the trade and technology conflicts are resolved soon. Staff comments are welcome.***

- Staff have highlighted these issues in several recent WEOs and we will continue to follow them closely. Past WEO analysis (eg Chapter 4 of the April 2018 WEO) found that closer global integration of economies has increased the spread of knowledge and technology across countries. Scenario Box 1 of the current WEO examines the implications of advanced economies reshoring production. A retreat from global integration - even if eventually reversed - could inhibit technology diffusion and slow global potential growth, inflicting long-lasting damage on global activity.

24. ***The near-term outlook remains weak and is also fraught with significant downside risks. Growth is anticipated to moderate in several systemic economies with knock-on effects on smaller open economies, particularly countries heavily integrated in the global supply chains. The WEO projection of a moderate global economic recovery in 2020 is predicated on stronger growth in India and tentative***

expectations of economic turnaround in a small group of emerging market economies in distress or with weaker macroeconomic conditions in 2019 due to idiosyncratic factors. In staff view, what is the worst-case scenario for global growth in 2020 and over the medium term if these economies do not recover or stabilize sufficiently and durably?

- Please see answer to Question 18.

25. ***The outlook remains contingent on precarious assumptions and subject to prominent downside risks, such as geopolitical frictions, policy uncertainties, a no-deal Brexit and a further deepening of the US-China trade dispute. Indeed, risks have become more pronounced than they were in April, and baseline growth projections in most major advanced and emerging economies have been revised downwards. Could staff elaborate on how it assesses the risks of a global recession taking place in the next few years and what could be the potential triggers?***

- As shown in Figure 1.23 of WEO Chapter 1, the estimated probability of 1-year ahead global growth below 2.5 percent—the 10th percentile of global growth outturns in the last 25 years—has increased since the spring and is now close to 9 percent. Possible triggers include further intensification of trade tensions and disruptions to supply chains that severely undermine business confidence and weaken investment; abrupt declines in financial market risk appetite that result from these intensifications or from other precipitating factors such as a no-deal Brexit or a sharper than expected slowdown in China.
- As technical background, the probability is calculated using the G20MOD module of the IMF's Flexible System of Global Models (FSGM) in two steps. First, the model is used to solve for economic shocks that drove the world economy in the past. Historically, the key drivers of the cyclical dynamics of output, inflation, and interest rates were domestic demand and oil price shocks. Second, these estimated shocks are then used to generate a large number of counter-factual scenarios for the world economy by sampling five-year histories from their empirical joint distribution function. The resulting joint predictive distribution for a rich set of economic variables is internally and globally-consistent and is suitable for risk assessment both at the global and individual-country level.

26. ***As conventional monetary policy approaches its limits and runs the risk of losing efficiency, alternative policies are again to be considered. While quantitative easing (QE) measures have helped ensure financial stability under the extreme conditions of deflationary pressures and entrenched low-inflation expectations, it is not clear how effective a new round of QE in key jurisdictions would be to provide traction to activity. Could staff comment on the ongoing debates about the appropriateness of***

resuming aggressive QE policies, either in the current scenario or in case risks materialize?

- As discussed in WEO Chapter 1, for advanced economies, where growth in final demand is generally subdued, inflation pressure is muted, and market-pricing-implied measures of inflation expectations have softened in recent months, accommodative monetary policy remains appropriate to guard against a further deceleration in activity and a downshift in inflation expectations. This is especially important in economies with inflation persistently below target and output that already is, or may fall below, potential. Nonetheless, the low level of policy rates in many countries and the decline in long-term interest rates to historically very low or negative levels, while reducing the likely impact of further monetary policy easing, expand fiscal room as long as these conditions last. In this context, in countries where activity has weakened or could decelerate sharply, fiscal stimulus can be provided if fiscal space exists and fiscal policy is not already overly expansionary. In countries where demand is weak, yet fiscal consolidation is necessary, its pace could be slowed if market conditions permit to avoid prolonged economic weakness and disinflationary dynamics. Moreover, given that continued monetary accommodation can foster a buildup of financial vulnerabilities, stronger macroprudential policies and a proactive supervisory approach will be critical.

27. ***Weakening investment activity represents a prime factor behind the slowdown in manufacturing, trade, and, ultimately, global economic growth. Confidence effects of trade tensions and political uncertainty appear to have played a role in this regard. At the same time, manufacturing activity and trade are also influenced significantly by pronounced global investment cycles. In this light, the current deceleration can at least partly be seen as normalization from previously elevated levels. Apart from manmade economic threats associated to populist and protectionist policies, does staff see any further - potentially structural - differences compared to past investment cycles like those in 2011/12 or 2015/2016?***

- A key structural difference between this investment downturn and the ones seen in 2011/12 and 2015/16 is slower investment in China, consistent with the transition to more sustainable pace of growth. This is a key structural factor that is likely to continue weighing on global industrial output growth even as other temporary factors in the current downturn wane.

28. ***Activity in services has proven quite resilient so far, as also indicated by the respective global purchasing managers' index. However, historically, there appears to be a high degree of synchronization (with a slight delay) with the respective index for manufacturing. Against this background, how does staff assess the likelihood for a more pronounced dampening of activity also in services?***

- So far, services activity has been broadly resilient even as manufacturing has been weak over the past 12 months. However, there are some signs in survey data of decelerating service sector activity. New services orders, for example, have weakened in the euro area and United States. As WEO Chapter 1 elaborates, whether manufacturing weakness spills over more broadly into the service sector will depend on how consumption and the labor market hold up. Continued robust consumer spending would support services activity and ensure that service sector firms continue to expand employment (which, in turn, would support consumer confidence). Staff's view is that this dynamic is likely to continue, considering that financial conditions remain supportive.

29. ***Staff's projections appear to be somewhat optimistic. So far, we do not see compelling signs for the expected pick-up of global growth in the remainder of 2019. We would thus be interested in staff's view on the likelihood of further downward revision of the projections for 2019 and 2020 going forward. Could staff also comment on the differences between its projection for 2020 compared to the latest OECD forecast?***

- On the projected recovery in 2020, please see answer to Question 18.
- Regarding the difference between IMF and OECD projections for 2020 (3.4 percent versus 3 percent), about half of the 0.4 percentage point difference comes from forecast differences for G20 countries. The OECD's forecasts are weaker than Fund forecasts for most countries in this group. Among these, prominent differences are for Turkey, the United Kingdom, India, and Germany. For Germany, however, most of the difference is due to a difference in definition. The OECD provides a working day adjusted forecast (0.6 percent) whereas the Fund provides an unadjusted forecast (1.2 percent). On an adjusted basis, the Fund's forecast for Germany in 2020 would be 0.8 percent.
- The remaining difference in the global growth forecast for 2020 is accounted for by non-G20 countries that account for about 20 percent of global GDP on PPP basis.

30. ***Major challenge to the global economy stems from the escalating disruption of trade. Multilateral trade system is increasingly undermined by unilateral impositions of tariff measures, in contradiction to the WTO rules. These actions are further aggravated by the growing threat to the WTO dispute settlement system. By the end of this year, the international community may find itself without a functioning Appellate Body due to the lack of quorum. While the threat to the WTO settlement system features prominently in the recent update to the Global Risk Assessment Matrix, we did not find it in the updated scenario in Box 2. Staff comments on the likely effects of the WTO paralysis would be useful.***

- The strengthened WTO dispute settlement process that resulted from the Uruguay Round negotiations and came into effect with the creation of the WTO in 1995 has promoted adherence to trade rules and norms, bringing also greater openness, stability, and transparency in trade relations—including, importantly, in the wake of the global financial crisis. Staff believes that any degrading of that system would be of concern. Staff will address this further in an informal briefing on trade policy developments later this year.

31. ***We share staff's conclusion that fiscal policy can play a more active role in supporting global growth. Staff rightly note that very low interest rates (or in some cases negative levels) can reduce the cost of debt service. Here, we encourage the Fund to provide deeper assessment of the available policy space that can be used in any economic downturn. Have staff calibrated the additional fiscal space created from the ultra-accommodative monetary policy, particularly given that about $14 trillion of the current bonds offer negative yields?***

- The additional fiscal room created will vary based on country circumstances. However, in general the decline in long-term interest rates since the spring – particularly among advanced economies, but also for many emerging market and developing economies - has reduced debt service costs and freed up fiscal room in national budgets. The optimal use of this additional room varies based on country circumstances. In general, where debt sustainability is not a concern, countries can take advantage of the additional room to deploy measures that raise potential output and enhance inclusiveness (e.g. additional spending on infrastructure, education, and health). Ensuring that automatic stabilizers are operating fully would help preempt protracted weakness should demand weaken and unemployment rise. Where activity is already weakening, monetary policy is constrained, and fiscal policy is not already overly expansionary, discretionary fiscal stimulus should be used, including with measures that facilitate the shift toward a low-carbon economy. However, where debt is already high and debt sustainability is a concern, fiscal consolidation will need to continue – although its pace can be adjusted as needed to support aggregate demand and countries can take advantage of the decline in interest rates to lower borrowing costs, while these conditions last.

32. ***We take note of the work in Scenario Box 2 and wonder if staff can add the impact on commodity exporters and LICs in future WEO analyses. Staff comments are welcome.***

- Staff will explore ways to bring this analysis into future WEOs.

33. ***We welcome the analysis in Box 1.1 on the recent developments in the global automobile industry. According to staff, the industry's downturn contributed***

significantly to the slowdown in global trade and growth. Can staff provide the breakdown of the growth impact from different supply and demand factors, including from the rollout of new emission tests?

- Disentangling the effects of the various factors at play is outside the scope of the Box.

WEO Analytical Chapter 2 Regional disparities

34. ***Regional disparities are a challenge in much of the membership and the WEO chapter lands some important analytical messages. The conclusion that the sectoral mix matters little, whereas differences in productivity within sectors across regions matters more, is striking. Our understanding of the wider literature suggests that differences in the quality of factors of production – and skills in particular – play an important part in regional differences. The box on place-based policies does not mention risks related to displacement, which other research suggests may be significant. Is this something staff have considered?***

- In the WP which Box 2.4 draws upon (Gbohoui, Lam, and Lledo 2019), the authors note that the choice of policies should ensure efficient allocation of resources, macroeconomic stability, and be growth-friendly. The paper stressed that place-based policies could be a complement to existing fiscal tools in addressing regional inequality and noted that policymakers need to be mindful of the potentially mixed effects from spatially-targeted interventions, including that gains in the targeted regions such as higher employment could be temporary and offset by losses in other, non-targeted regions (displacement). As remarked in the chapter conclusions, any place-based policies need to be carefully calibrated to ensure that help rather than hinder beneficial adjustment and to avoid interfering with the success of other regions (including through displacement effects; see Rodriguez-Pose 2018 as cited).

35. ***We share staff's tentative policy recommendations to facilitate regional adjustment to adverse local labor demand shocks, including greater fiscal decentralization. We also highlight the idea that national structural policies that encourage more open and flexible markets are associated with improved regional adjustment to shocks. We would appreciate staff's comments on whether this may be consistent with benefits from some decentralization of labor market policies.***

- The chapter's focus is more on how national structural policies may influence regional labor market adjustment and capital reallocation, with the key finding that national policies that encourage more open and flexible markets are associated with greater regional resilience to shocks and more effective reallocation. Although the chapter does not undertake analysis of decentralized labor market policies, it does cite some of the relevant literature, which presents evidence that collective bargaining arrangements for employment and wages function better if they attempt to take account of local differences in labor market conditions (for example, see Boeri and others 2019). By better taking account of local differences, such arrangements effectively introduce greater flexibility, which is consistent with the findings from the chapter regarding national labor market policies.

36. ***It provides a very useful analysis of subnational regional disparities in advanced economies (AEs). Though the study has been done in the context of AEs, topic is relevant across economies in the developed, emerging and the underdeveloped world. It would be useful if staff consider extending this work to emerging and low-income countries as well. Building on the analysis presented in the study, important conclusions can be drawn from the overall policy perspective. First, boosting educational and training quality help in adapting to the changing world and disproportionately benefit the lagging regions. Secondly, greater fiscal decentralization, enabling spatially differentiated policies, reduce regional disparities and lastly, less stringent employment protection regulation and less generous unemployment benefits impart greater resilience to trade and technology shocks.***

- The increase in disparities in AEs and data availability motivated the chapter's focus on these economies. Regional disparities within EMDEs are clearly important (as documented by their overall higher level), but limited time and spatial coverage of regional data in EMDEs, particularly on the sectoral production and employment mix, hamper the ability to undertake an analysis similar to what was done for AEs in the chapter. However, it will be a topic that we continue to think about for possible future work.

37. ***The Chapter notes that growing sectoral productivity differences appear to explain widening disparities across subnational regions, mirroring trends in overall income inequality in many advanced economies. This trend is reinforced by the sectoral employment mix in lagging regions, which is leading to specialization away from dynamic service sectors. Moreover, lagging regions appear to suffer more than other regions from the impact of technology shocks, which seem to have noticeable and persistent effects on labor markets and unemployment. Staff indicates that, in contrast, shocks from increased import competition do not seem to have marked average effects on regional unemployment and tend to impact labor force participation only temporarily. It would be useful if staff could provide a better explanation of the reasons behind these two results, differentiating between the impact of each type of shock.***

- The findings suggest that regions are better able to adjust to trade shocks than they are to technology shocks, on average. One possible explanation for these different findings could be that trade shocks' direct impacts are primarily on tradable sectors, while technology shocks impact both tradable and non-tradable sectors. In other words, the within-region, cross-sectoral reallocation of workers is more difficult after a technology than a trade shock, particularly for lagging regions where adjustment appears to be even more hampered. Unfortunately, we do not have sufficiently granular data on worker reallocation to directly test this hypothesis.

38. ***Staff indicates that there is a strong case to advocate greater fiscal decentralization to address regional disparities. We are not convinced, however, that there is a strong justification for such approach, as international experience shows that poor regions under decentralized regimes often find it hard to rely on their own resources to address regional growth and unemployment. Staff comments are welcome.***

- As noted in the chapter, fiscal policies can play a role in addressing regional disparities, but need to be properly designed to take account of country and context-specific circumstances. As indicated in WEO Box 2.4, when designing and implementing place-based policies, it is important to assign responsibilities to the appropriate level of government. The choice should be sensitive to the intergovernmental fiscal arrangements within a country (for example, a unitary or federal state) and the associated revenue-raising capacity and scope for intergovernmental transfers. The background working paper (Gbohoui, Lam, and Lledo 2019; p.23) highlighted that considerations in assigning government levels to address regional inequality could include the current level of fiscal and political decentralization, the design of inter-governmental transfers, and the technical capacity of the subnational governments. Coordination between government levels with shared responsibilities is key. While acknowledging the existing literature, staff does not advocate any particular strategy such as greater fiscal decentralization to address regional inequality.

WEO Analytical Chapter 3 Structural policies EMDCs LICs

39. ***We welcome the new IMF structural reform data set. It is critical to continuously monitor the short- and long-term impact of these reforms in order to correct course when necessary. Thus, we would welcome if the data set could be developed further. Does staff envision following up on de jure reforms to see if these were implemented and whether they were so successfully, i.e. what were the specific outcomes?***

- We plan to make the dataset available to country desks, who are in the best position to track the implementation of reforms in specific countries and examine whether they successfully translated into improved economic outcomes.

40. ***The creation of the structural reform database itself is a remarkable achievement. We recommend continued investment in the database to support enhanced surveillance and program conditionality. Can staff elaborate on what is needed to keep this database current (e.g., resources, data from authorities, cooperation across IMF Departments, etc.). Are there plans to expand its scope, for example to broaden the product market component beyond utilities?***

- We plan to continue updating the database and extending its coverage both in terms of countries (expanding the set of low-income countries) and areas of regulation (including in product markets) covered.
- The support of the UK's Department for International Development (DFID) has been key for the creation of the dataset. In this regard, continued support from DFID, as well as from other authorities, would be key.

41. ***Can staff comment on whether the dataset could be further developed to better capture the design and intensity of structural reforms, through more granular data and/or by complementing the data with case studies to better capture context and reform specifics.***

- The dataset provides granular information on the degree of regulation in each area. In particular, each indicator (except for tariff) is composed of several sub-indicators, which are coded and graded based on the finest possible level of granularity.
- We fully agree that case studies would be important to capture context and reform specifics. In this regard, we plan to make the dataset available to country desks, who are in the best position to track the implementation of reforms and examine whether they successfully translated into improving economic outcomes.

42. ***Staff should be commended for its efforts to develop a dataset of structural reforms for a large sample of developing and developed countries. First, we would appreciate it if staff could briefly elaborate on the criteria used to determine the depth of reforms (which resulted in indicators varying between zero and one), as well as on the implications of focusing only on "de jure" regulations which may not always capture "de facto" changes.***

- The criteria and methodology to determine the depth of reform is typically based on previous studies and is presented in online Appendix 3.1. Each indicator (except for tariff) is composed by several sub-indicators, which are coded and graded based on the finest possible level of granularity. We then aggregate the various sub-indicators using their sum, normalized between zero and 1. While any aggregation approach is subjective and arbitrary, this aggregation is robust to other aggregation approaches such as the Principal Component Analysis (PCA), the sum of squares and the sum of square roots.

- The reason for focusing on de jure regulation is that it better captures actual, actionable policy settings than de facto indicators. In addition, de facto measures may be directly affected by economic conditions (e.g. the degree of financial openness may depend on cyclical economic conditions). That said, the analysis presented in online Annex 3.1 shows that there is a close relation between the de jure regulation and de facto outcomes of such regulation.
- Regarding the trade indicator, we concur, and we acknowledge in the chapter, that import tariffs capture only one aspect of barriers to trade, as nontariff barriers tend to be pervasive in several advanced and developing economies (Ederington and Ruta, World Bank Policy Research Working Paper No. WPS 7661, 2016).

43. ***We believe that, until a formal in-depth discussion of this dataset by the Board, staff should refrain from presenting it as an "IMF dataset", which reflects the views of the institution. As far as we know, the Board discussion is expected only in May of next year. At this stage, the dataset raises several concerns that should be addressed going forward. Firstly, the content of the dataset and the methodology of its compilation largely remain a black box. The Board has never had a chance to discuss it in detail. Secondly, as far as we understand it, the approach used by staff to measure progress in structural reforms is linked to the degree of liberalization, implying that full unconditional deregulation is an optimal choice. We are concerned that such an approach may be at odds with the substantial and difficult evolution in the Fund's policy views, as it shifted away from the naive interpretation of the Washington Consensus. Staff may wish to elaborate on this issue. We also question the reasons for staff to leave aside structural reforms in advanced economies, where productivity has declined, but progress in structural reforms remains limited.***

- The content of the dataset and the methodology is described in online Annex 3.1. As mentioned during the informal board discussion on the SDN on the political economy of reforms, the dataset will be formally presented to the Board in the context of a new Board Paper on Structural Reforms.
- The approach followed in scoring the indicators (0 from tightest regulation) to 1 (full liberalization) does not imply *a priori* any normative statement on the optimal choice of regulation. That said, the findings of the chapter suggest that, on average, liberalization is associated with improved economic outcomes.
- The reason of focusing on emerging market and developing economies is because reforms in advanced economies have been deeply analyzed in a previous WEO Chapter (Chapter 3 of the IMF WEO April 2016) and follow-up work including SDNs and Working Papers.

44. ***The indicators on page 8 show that the labor market is the only structural area where there was no progress between 1973 and 2014. On this basis, is it fair to conclude that labor market reform is politically the most difficult?***

- The criteria and methodology to determine the depth of reform is typically based on previous studies and is presented in online Appendix 3.1. Each indicator (except for tariff) is composed by several sub-indicators, which are coded and graded based on the finest possible level of granularity. We then aggregate the various sub-indicators using their sum, normalized between zero and 1. While any aggregation approach is subjective and arbitrary, this aggregation is robust to other aggregation approaches such as the Principal Component Analysis (PCA), the sum of squares and the sum of square roots.
- The reason for focusing on de jure regulation is that it better captures actual, actionable policy settings than de facto indicators. In addition, de facto measures may be directly affected by economic conditions (e.g. the degree of financial openness may depend on cyclical economic conditions). That said, the analysis presented in online Annex 3.1 shows that there is a close relation between the de jure regulation and de facto outcomes of such regulation.
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45. ***We welcome staff's analysis showing that structural reforms can provide a major boost to growth in EMDEs, by raising output by more than 7 percent over a 6-year period. We would be interested to know how reform complementarities and trade-offs would affect this figure.***

- The figure implicitly assumes that reforms do not entail major complementary or substitutability. Complementarity (substitutability) between reforms would imply larger (smaller) gains than the sum of the effect of each reform reported in the chapter (7 percent). Since the chapter points to several important complementarities, the 7 percent figure may be seen as a lower bound.

46. ***The empirical analysis focuses on the positive effects of reforms on growth, employment and investment. We note that external finance reforms may negatively affect external sustainability if they are not-well sequenced. We therefore think it would be good to also consider the effect of these reforms on the current account balance. Staff's comments are welcome.***

- We agree that external finance reforms may negatively affect external sustainability if they are not well sequenced. Indeed, previous IMF research (Ostry, Prati, and

Spilimbergo 2009; Kose, Prasad, and Taylor 2011; IMF 2012; Furceri, Ostry, Loungani 2019) identifies certain threshold levels of financial development that an economy needs to reduce the risks associated with external finance reforms.

- We also recognize the importance of assessing the effect of external finance reforms, and more broadly structural reforms, on the current account balance. We envisage to examine this important issue in future research.

47. ***We emphasize the need to avoid duplicating the same reforms from one country to another in country programs. We strongly endorse the need to identify "binding constraints on growth", and therefore call on staff to seek expert guidance as appropriate on the approach followed in specific country programs and the extent to which our structural reform conditionality is well-justified. Staff comments would be welcome.***

- We fully agree that reform implementation should be tailored to each country's economic circumstances (including its set of regulations in different areas) and based on guidance from country experts. We believe that the newly constructed dataset is one element that will help country desks provide well-informed policy advice.

48. ***The study makes an observation that electoral costs of real sector reforms, including labour reforms, are relatively low. This appears surprising as labour reforms is one of the most challenging areas to move forward. Staff may like to comment.***

- We agree that there is a tension between the (good) economic conditions under which reforms are more likely to pay off and the (bad) economic conditions under which they are more likely to be carried out. We also concur that the limited electoral effect of labor market reforms observed in the data appears surprising. While this is consistent with previous evidence for advanced economies (Buti et al. 2010), we think that two factors can drive this result. First, compared with other areas, the number of reforms of labor market regulation (employment protection legislation) is small and therefore it may not provide enough variation in the data to identify significant electoral effects. Second, and as acknowledged in the forthcoming SDN upon which the chapter's box builds, selection bias may imply that the electoral costs of reforms are larger than those estimated. For example, governments fearing electoral costs from reforms may decide to not implement those reforms that they may perceive as more difficult (such as labor market reforms). Similarly, governments may decide to implement difficult reforms only when they know they can be reelected because of their popularity in other dimensions

49. ***The experience of EMDEs with structural reforms underscores the importance of strengthening governance, accounting for country circumstances, internalizing***

political-economy considerations, as well as timing and sequencing. The initial conditions beyond the narrow focus of specific reform initiatives, such as degree of informality and governance strength, must be properly accounted for when designing a reform program. One of the main conclusions of staff empirical analysis is that "getting reform packaging, sequencing, and prioritizing right will […] be key to maximizing payoffs". In terms of sequencing, the study implies that some reforms could yield non-negligible costs if the timing is not right. Based on recent experience, are there lessons to be learned for resequencing ongoing reforms, when the initial timing and conditions were not appropriate?

- The chapter offers some insights on prioritization and sequencing of reform when economic conditions are not ideal. Under weak economic conditions, priority could be given to reforms whose gains do not depend on prevailing economic conditions—such as product market deregulation. Reforms—such as easing job protection legislation and deregulating the domestic financial sector—that do not pay off in bad times would be best enacted with a credible provision that they will take effect later, when economic conditions are stronger. If it is not possible to delay when they take effect, some reforms such as easing job protection legislation can be grandfathered—that is, new rules would apply only to new beneficiaries—although this comes at the cost of delaying the full gains from reform. In addition, job protection deregulation should come alongside some strengthening of social safety nets (Duval and Loungani, IMF SDN No. 19/04, 2019). In countries with credible medium-term fiscal frameworks and available fiscal space, countercyclical fiscal policy could also alleviate any short-term costs of reforms.

50. ***A concern about Chapter 3 is related to staff's approach to assess governance. This part is based on the Worldwide Governance Indicators (WGIs), which staff incorrectly attributed to the World Bank. More importantly, it is not in line with the Fund's recently adopted Framework for Enhanced Fund Engagement, which calls for using reliable sources of information, including a body of knowledge derived from the Fund's own activities. Thus, the Fund has country-specific information on progress in governance from the Fiscal Transparency Evaluation, the Public Investment Management Assessment (PIMA), C-efficiency estimates, AML/CFT etc. Why do we need to limit the analysis and rely on inferior perception-based indicators, such as the WGI, when the Fund itself has more substantive and more reliable information? As staff also highlighted in footnote 6, page 8 of the chapter, the WGIs are not comparable across different time periods, so it is not clear to us how they can be used in the analysis based on time series. Another important deficiency of the WGIs is that they show virtually no meaningful changes over a very long period, as staff noted in the text. The overall statement about the lack of progress in governance in the EMEs and LICs, in our opinion, is not supported by evidence and has to be reconsidered by staff.***

- The reason we used perception-based indicators, such as the WGI, in the chapter is that these indicators provide sufficient country- and time-coverage for the empirical analysis. This, unfortunately, is not the case for the indicators developed by the Fund, which typically cover only few years and a more limited set of countries. Footnote 5 of the Chapter clarifies that "WGIs do not reflect the official views of the World Bank and are not used by the World Bank Group to allocate resources".
- As acknowledged in the chapter, the WGI indicators are based on a standardized scoring of raw data that keeps the world average constant over time. This is why we do not report the evolution of the standardized indicators. At the same time, information provided by the World Bank based on underlying data sources suggests little evidence of systematic improvement in governance over time (https://info.worldbank.org/governance/wgi/#home).

51. ***We welcome the detailed analysis in Chapter 3 on the macroeconomic effects of structural reforms in EMDEs. We agree with staff on the need for careful design and prioritization of reforms, supported by strong ownership and good communication. Indeed, we encourage staff to take into account the political reality on the ground when designing Fund programs. Box 3.1 offers interesting insights about the political effects of structural reforms. We note the finding that reforms are best implemented when economies are performing well. When countries are facing unfavorable economic conditions and approach the Fund for a program, we wonder how staff would reflect upon these findings in the design of the program?***

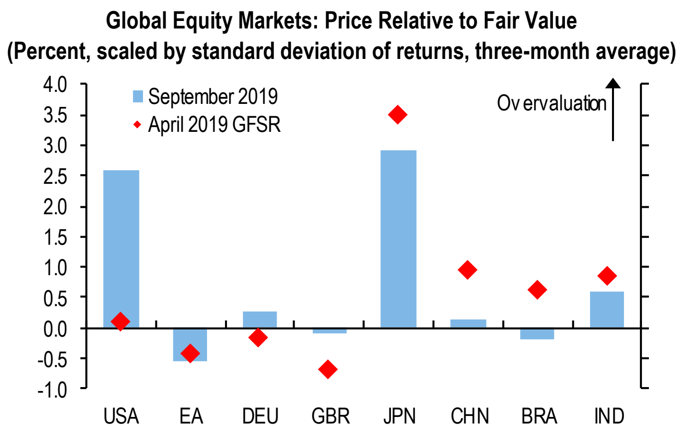
- The findings of Box 3.1 are based on a forthcoming SDN on the pollical economy of reforms presented to the Board during an informal meeting on 18 September 2019. A review of selected case studies in the SDN suggests that, even under difficult economic conditions, governments may not be penalized at the ballot box when: (i) reforms coincide with a transition to democracy; or (ii) there is strong ownership and consensus that a broad reform package (including to foster macro-stabilization) is unavoidable; and (iii) the government effectively signals political commitment and an enhanced dialogue to garner support with business and civil society. We believe that these elements are key for reform design, including during programs.
- In addition, the chapter offers some insights on prioritization and sequencing of reform when economic conditions are not ideal. Under weak economic conditions, priority could be given to reforms whose gains do not depend on prevailing economic conditions—such as product market deregulation. Reforms—such as easing job protection legislation and deregulating the domestic financial sector—that do not pay off in bad times would be best enacted with a credible provision that they will take effect later, when economic conditions are stronger. If it is not possible to delay when they take effect, some reforms such as easing job protection legislation can be grandfathered—that is, new rules would apply only to new beneficiaries—although

this comes at the cost of delaying the full gains from reform. In addition, job protection deregulation should come alongside some strengthening of social safety nets (Duval and Loungani, IMF SDN No. 19/04, 2019). In countries with credible medium-term fiscal frameworks and available fiscal space, countercyclical fiscal policy could also alleviate any short-term costs of reforms

- Regarding future updates of the dataset, we envisage to extend it, covering more recent years and expanding the country coverage.

Global Financial Stability Report

- **Factual correction:** Please note there was an error in the equity valuations results for the euro area in Figure 1.2 panel 3 on p.10. The corrected version, which has been updated and is now presented on a 3-month moving average basis, is below.



52. ***While short-term vulnerabilities in the banking sector appear reasonably contained, we miss an assessment of the long-term implications of the lower growth and interest rate projections on the banking sector. Could staff comment?***

- The assessment of banking sector in the GFSR – the results of which are shown in Figure 1.4 - finds that aggregate vulnerabilities are relatively moderate overall, but that pockets of vulnerability remain. While the long-term implications of a lower growth and interest rate environment for banks are not discussed in detail, the text does note that lower interest rates and flatter yield curves – along with a subdued economic outlook – have driven bank equity market valuations down as investors expect compressed interest margins to reduce the profitability of these institutions. If these market valuations are used in place of the book value in capital ratios – something which has been found to be a relatively good predictor of bank stress – some weaker banks can be identified, as shown in Figure 1.5, panel 3.

53. ***We understand that riskier and more illiquid investments by institutional investors may promote a further buildup of vulnerabilities, while portfolio similarities may***

amplify market sell-offs in the event of adverse shocks. These issues cannot be solved easily given the expected future trend of aging and low interest rates in many advanced countries and the suggested policy actions on p61 don't seem to be strong enough to prevent future risks triggered by global-scale shocks. How could further multilateral cooperation on this matter assist?

- Indeed, a stronger multilateral effort will help advance the policy initiatives to mitigate leverage and other balance-sheet mis-matches (described in Table 1.2) and thus help reduce the buildup of vulnerabilities in institutional investors. A coordinated multilateral effort would also help eliminate the possibility of escaping regulations in one jurisdiction by locating an activity in another jurisdiction, as well as other types of regulatory arbitrage.

54. ***We find staff's Growth-at-Risk analysis a powerful tool for assessing the overall state of financial sector risks. We particularly appreciated seeing results based on both financial conditions indices and vulnerability indicator; we worry that results based only on a financial conditions index (e.g. GFSR Figure 1.8) may be missing important medium-term dynamics such a credit growth, house price growth and external imbalances. We encourage staff to consistently use both metrics going forward. We also wonder whether staff had considered factoring into their analysis indicators of resilience such as bank capital?***

- In our global Growth-at-Risk (GaR), vulnerabilities are captured through the inclusion of nonfinancial sector credit within the measure of financial conditions (this was previously highlighted in the April 2018 GFSR). As noted, the financial conditions index used for the analysis in Box 1.2 only includes the price of risk variables (and does not include credit), while vulnerabilities are captured by a non-financial sector vulnerability index. The inclusion of financial conditions and vulnerabilities as two separate inputs into the model allows us to disentangle their effects on GaR and present the comparative statics analysis. As we continue to develop our work on the assessment of vulnerabilities, we will look to incorporate broader range of vulnerability indicators in the GaR framework.

55. ***We generally share the assessment of the key vulnerabilities in the global financial system as well as the policy recommendations focused on the strengthening of the supervisory and macroprudential framework. The more accommodative monetary policy stance is justified to counter the weakening economic activity. Still, easing financial conditions may contribute to the accumulation of financial system vulnerabilities, and preventive actions appear critical. At this stage, investors are possibly more complacent to downward risks, as they anticipate financial conditions to be durably accommodative. In this regard, we would welcome staff***

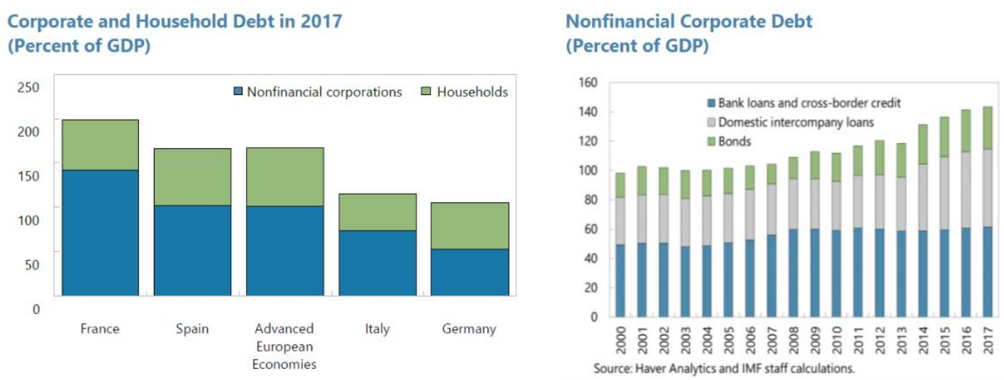
comments on how to balance short-term growth support and long-term financial stability, beyond the use of macroprudential measures.

[To be addressed at the Board meeting]

56. ***Finally, and contrary to the 2019 FSAP for France published in July, the calculation of debt-at-risk for French nonfinancial firms is based on an aggregate corporate debt including intercompany loans which does not make a lot of sense economically and may result in contradictory findings.***

- We rely on both BIS statistics and national financial accounts (which are fully matched with BIS data) for the data on aggregate corporate debt. We recognize that in the case of France these data (141 percent of GDP in 2018) include intercompany loans. We acknowledge this in the Notes to relevant figures.

Figure 3. France: Private Debt



Sources: Haver Analytics; and IMF staff calculations.
Note: Figures are based on national account data, which may not yet incorporate the reclassification on the French National Railways (SNCF) into the general government for the years 2016 and 2017.

- The 2019 France FSSA reports aggregate debt both including and excluding intercompany loans (p. 12 para 3 and Figure 3): "Unconsolidated nonfinancial corporate debt increased from 110 percent of GDP in 2010 to 141 percent of GDP at end-2017, driven mainly by loans among nonfinancial corporates and bond issuances. Netting out loans among nonfinancial corporates, consolidated corporate debt-to-GDP is lower at 89 percent of GDP and is close to the EA average."

- The main difference between the estimates of debt-at-risk in the FSAP (p. 22) and the GFSR comes from that the FSAP uses debt-at-risk in nominal terms from the sample and the GFSR extrapolates debt-at-risk estimates to the system level. The GFSR's extrapolation entails that (1) the weight of SMEs in total corporate sector debt is higher than the weight of SMEs in the sample (which is skewed towards large firms), and (2) the debt-at-risk as a share of corporate debt is applied to total corporate sector debt to obtain the nominal amount of debt-at-risk (before dividing it by GDP).

- Notwithstanding differences in the samples, without the extrapolation, debt-at-risk to GDP in our sample at the beginning of the scenario would be 7 percent of GDP which is similar to 6 percent of GDP in the FSAP.

57. ***Macro-prudential policy alone cannot correct for the unintended consequences of accommodative monetary policies. The GFSR shows consistently since at least 2016 that vulnerabilities continue to build up. With long term yields in several major advanced economies at ultra-low levels investors are increasing their portfolio risk profile, corporates are leveraging up and house prices keep increasing. The GFSR states that term premiums are below fundamentals, equity markets are overvalued, and corporate bond prices remain stretched. Macro-prudential policies can slow down the build-up of such vulnerabilities only in specific sectors and countries. Complete coverage would also seem to defeat the purpose of accommodative monetary policy. It would be like giving gas while applying the brakes at the same time. How does staff square its advice to rely on macroprudential tools with its observation that few tools are available in many jurisdictions?***

- [To be addressed at the Board meeting]

58. ***We welcome the attention to fixed income funds' ability to meet liquidity stress (Box 3.1) and take note that, on average, their liquid assets have declined during recent years thereby exposing a larger share of them to potential liquidity shortfalls in the event of large investor redemptions. It is also interesting to see that portfolio-similarities among funds seem to be increasing (Figure 3.2), and what implications this could have for the financial system as a whole. Is staff planning to conduct any further analysis of liquidity stress for other types of funds than fixed income funds?***

- At the current juncture, the focus of chapter 3 on fixed-income funds is appropriate given that those are the types of funds that are most directly affected by search for yield and may potentially be vulnerable to liquidity stress. Future work may also include money market funds and mixed/balanced funds.

59. ***The April 2019 GFSR recommended that countries consider developing macroprudential tools to contain vulnerabilities in the nonbank financial sector, especially in corporate debt funded by nonbank lenders, as few tools were available to regulators. Can staff comment on progress in this area?***

- Table 1.1 and Figure 1.8, panel 2 present information on the level of the countercyclical capital buffer and the number of macroprudential policy tools that have been used in economies with systemically important financial systems. The GFSR notes that because the necessary macroprudential tools are lacking in several major economies, such tools should be urgently developed.

60. ***The October 2018 WEO highlighted concerns associated with growing cyber security and fintech risks. Can staff comment on developments in these areas, as well as progress in mitigation measures?***

- The GFSR has also noted cyber risks in the past, for example the October 2017 GFSR included a box on cyberthreats as a financial stability risk. GFSRs seek to cover a selected number of issues in each report and so while the latest edition does not include material on developments in cyber security and fintech risks, Fund staff continue to work on these areas.

61. ***There could be significant transition risks associated with climate change initiatives. This could have an impact on policies and the financial sector. We wonder if staff intends to look at the potential implications of climate change on inflation and monetary policy?***

- At present there are no plans to examine the effect of climate change on inflation and monetary policy. The April 2020 GFSR intends to further investigate the financial stability implications of climate change.

62. ***Considering that yield curves have either inverted or flattened in major economies, could staff clarify whether they see an imminent recession?***

- While the GFSR does not assess the probability of a recession—as this is discussed in the WEO—our overall assessment is that medium-term downside risks to growth remain elevated. Turning to the question of an inverted yield curve, staff recently published an IMF Blog leveraging the Growth-at-Risk framework to analyze the potential impact of the recent yield curve inversion on future real GDP growth. Conditional on an inverted yield curve, downside risks to global growth do increase. However, it is important to note that the yield curve slope is just one component of the overall financial conditions, which are currently very accommodative. Furthermore, there are open questions about the reliability of the signal from an inverted yield curve given the compression of term premia and the use of unconventional monetary policies. For example, historically, credit spreads have widened when the yield curve was inverting, while in this case the opposite is true (credit spreads have continued to compress).

63. ***We share the conclusion that macroprudential policies should be tightened as warranted, with the appropriate policy mix between macroeconomic and macroprudential policies being tailored to the specific circumstances faced by each economy. In this regard, we believe that the recommendation at the end of page 5 of the Executive Summary that economies facing a significant slowdown should focus squarely on more accommodative policies should be qualified by considering available policy space on a case by case basis.***

- The text in the Executive Summary is based on the more detailed discussion in paragraphs 36-37 in Chapter 1 of the GFSR. In Chapter 1 we note that for economies facing a significant slowdown, authorities may look at ways to ease monetary policy but there may be limited policy space in many systemically important advanced economies. The report also notes that monetary policy could be complemented by fiscal easing in countries that have fiscal space and where financial conditions allow.

64. ***Could staff comment on the main reasons why countercyclical capital buffers have so far been used only infrequently as a tool to increase the resilience of the banking sector? Could it also elaborate on the downside risks associated with the housing market?***

- We would rather not speculate on reasons behind actions taken by authorities, but our advice in the GFSR is that in countries where economic activity remains robust, financial conditions are easy, and vulnerabilities are high or rising, policymakers should tighten broad-based macroprudential policy tools, such as the countercyclical capital buffers. The latest GFSR does not discuss downside risks in the housing market, although it does include an assessment of vulnerabilities in the household sector in Figure 1.4, Figure 1.6 (panel 3) and in paragraph 31. The April 2019 GFSR also included a chapter on downside risks to house prices.

65. ***We note, however, from Table 1.1 that many countries with systemically important financial sectors lack the necessary macroprudential tools. While we join staff in encouraging these countries to develop such tools, we welcome staff elaboration on how coordination between bilateral and multilateral surveillance is being conducted to report on the progress, or lack thereof, in the implementation of staff recommendations.***

- [To be addressed at the Board meeting]

66. ***We continue to follow with great interest the implementation by staff of the new Monitoring Framework for Global Financial Stability (MFGFS) to detect emerging vulnerabilities and we consider that the details provided in the referred SDN will***

contribute to higher transparency and improved communication. One of the benefits of such a framework is to assess how vulnerabilities evolve across countries and over time, and therefore it is important to ensure comparability over the GFSR cycle. In this regard, we note that the number of systemically important economies facing vulnerabilities in the insurance sector was revised upward retroactively for the April 2019 GFSR and their related risk raised from "moderate" to "elevated". Could staff confirm our understanding that this increase is the result of the addition of four new indicators? Relatedly, does this suggest that more coverage, by adding new indicators, may help to uncover other vulnerabilities?

- This is correct. The addition of 4 new indicators has helped improve the assessment of vulnerabilities in the insurance sector. The addition of two new indicators in the leverage and credit buckets as well as two indicators measuring vulnerabilities from foreign and equity investments has helped not only to improve the assessment of both current and past vulnerabilities. We also hope that improved coverage will help uncover vulnerabilities in the future.

67. ***Staff details in Box 1.3 the challenges associated with the transition from interbank offered rates (IBOR) to alternative risk-free reference rates, noting that, while some progress has been made, the adoption of new benchmarks has been limited and market participants continue to issue new products based on IBOR. While we take note of the concerns raised by staff about this slow transition and its potential impact on global financial stability, it is not clear to us what kind of leverage the Fund has since this process is being driven by market participants. Staff elaboration is welcome.***

- Our objective in this box is to highlight the financial stability risks from delays in a necessary transition. While it is true that we do not have direct oversight, we hope that by raising awareness of the progress to date and remaining challenges, we can add to the calls from other official sector actors for market action on this important issue.

68. ***As conventional monetary policy approaches its limits and runs the risk of losing efficiency, alternative policies are again to be considered. While quantitative easing (QE) measures have helped ensure financial stability under the extreme conditions of deflationary pressures and entrenched low-inflation expectations, it is not clear how effective a new round of QE in key jurisdictions would be to provide traction to activity. Could staff comment on the ongoing debates about the appropriateness of resuming aggressive QE policies, either in the current scenario or in case risks materialize?***

- [To be addressed at the Board meeting]

69. ***As part of the tested, albeit evolving toolkit, well-targeted macroprudential measures could tackle rising vulnerabilities in specific economic sectors with undesirable or risky behavior. In any case, even accounting for the restrictions posed by the proximity with the effective lower bound, there are improvements to be considered in central bank communication and transactions with banks and non-banks. Staff comments are welcome.***

- [To be addressed at the Board meeting]

70. ***We appreciate the continued publication of the annexes to the chapters presenting models and data. They are very helpful and will contribute to the transparency and good communication of the analyses. Additionally, they provide the tool for readers that are interested in replicating the analysis for their own countries. We would appreciate it if staff could inform whether the dataset used in the analyses will be made available and if the comprehensive firm-level database for systemically important economies will be updated on a continuous basis. Furthermore, we would appreciate to know whether the new methodologies and models proposed would be included in the capacity development packages.***

- We plan to continue publishing models that are used in the GFSR. The posting of datasets is subject to copyright agreements.

71. ***We agree that policymakers should tighten macroprudential policies, as needed, tailored to the particular circumstances facing the economy and pursue a proactive supervisory approach. We would welcome staff elaboration on the apparent inconsistency between note to Table 1.1 and paragraph 36. Are macroprudential policy tools available but not used or need to be urgently developed in a number of economies?***

- The text in paragraph 36 notes that the necessary tools are lacking in several major economies and Table 1.1 does show that there are countries where no tools have been implemented for some sectors with high vulnerabilities.

GFSR Chapter 2 Global Corporate Vulnerabilities

72. ***We appreciate the analysis in Chapter 2 on corporate vulnerabilities in advanced economies, particularly the use of firm-level information, as accounting for heterogeneity is crucial in this type of exercises. In using this more granular information, it is important that the sample of firms be reasonably representative of***

the population of firms in the economy to ensure that the analysis is not biased by over-(under-)representation of certain types of firms, e.g. by size or sector of activity. In this respect, we have some reservations concerning the sample composition. For instance, the sample of US firms consists of roughly 5,000 firms of which about 58 percent are large and we wonder whether this is representative enough. This calls for a very careful interpretation of results in the second part of the chapter. This notwithstanding, we share the appraisal that corporate vulnerabilities should be addressed urgently, particularly with a more proactive use of macroprudential tools.

- The firm-level samples are usually skewed towards large firms. We make our best efforts to control for this. We estimate the shares of debt-at-risk in total debt separately for large firms and SMEs. We conduct the exercise for both Capital IQ and Orbis sets of firms (as well as WIND for Chinese firms). What is relevant for the estimation of debt-at-risk in the overall corporate sample is the share of large firms in terms of debt. We then provide four estimates of the weight of large firms, as described in Section 2 of Online Annex 1.1. Only one of these estimates is based on the sample's statistics. The central estimate presented in Chapters 1 and 2 yields 53 percent for the debt share of large firms in the US.

73. ***The chapter doesn't discuss the risks related to Collateralized Loan Obligations (CLOs) investing in leveraged loans. The April 2019 GFSR suggests that risks related to CLOs are limited as they are mainly held by non-bank investors. However, the September BIS Quarterly Review argues that banks may be indirectly exposed to CLOs. How does Staff assess the risks related to CLOs? And does Staff have information on the indirect exposure of banks, pension funds and insurance companies to CLOs? Leveraged loans are securitized and held by non-bank sector as CLO. With a view to encourage the institutional investors to manage the risk of investment portfolio appropriately, it is important to analyze more on the holding structure of CLO and the linkage with banking sector, and build the monitoring and regulatory framework. In this regard, some reports point out similarities and differences between current situation (leveraged loans and CLO) and past situation before financial crisis (subprime mortgage loan and CLO). Staff comments are welcome.***

- We broadly agree with the findings from other official institutions, including the September 2019 BIS quarterly review, that while CLOs structures appear more conservative compared to those ten years ago and do not embed the same risks of pre-crisis CDO structures, there are also similarities in risk appetite in the CLO market between today and then. These risks include the deteriorating credit quality of CLOs underlying assets, which we have highlighted since the April 2018 GFSR and reiterate in Figure 2.4 of the upcoming October 2019 GFSR.

- We also see potential risks in the high concentration of direct holdings of CLO tranches by a few banks, particularly in the US and Japan, among the largest investors. However, these exposures do not appear to represent a significant share of bank equity (see the April 2019 GFSR). There also remains uncertainty around the resilience of senior AAA CLO tranches, which depends crucially on the correlation of losses among underlying loans. As noted by the BIS, the unusually high share of leveraged loan deals with low investor protection could materially affect the timing and clustering of defaults, compromising the reliability of loss correlation estimations. That said, it would take materially higher default rates and lower recovery rates than those experienced during the GFC to generate losses at AAA tranches, given the enhanced subordination embedded in most current structures. Furthermore, there is limited available data on indirect exposures of banks, pensions funds, and insurance companies. The analysis we conducted in the April 2019 GFSR was based on estimates that we were able to gather from meetings with market participants.
- Still, we recognize the opacity of the indirect exposures of banks and non-banks to CLOs, where, for example, if non-bank investors were to experience losses on their CLO holdings, banks might be indirectly exposed through credit facilities or prime brokerage services, should financial leverage be employed to finance AAA tranches as witnessed during the GFC.

74. ***In our view, it could be more clearly pointed out that banks also remain an important investor group in the leveraged loan market; according to some estimates, banks are still the dominant investor group.***

- We agree that banks remain an important investor in the leveraged loan market, both through the direct exposure to loans via Term Loan-A’s and revolving credit facilities, as well as indirectly through CLO investments. Recent analysis from the Bank of England’s Financial Stability Report supports some of these views. However, we have very limited data on the direct and especially the indirect exposures of banks to leveraged loans, and our understanding is that these loans are typically of better credit quality than the leveraged loans sold to institutional investors. For example, the Term Loan-A’s and revolving credit facilities are believed to be less risky due to stronger covenants and seniority or repayment structure. Therefore, we have left out a more detailed discussion of bank exposures to leveraged loans due to data not being readily available, but we plan to investigate this topic further for futures analyses.

75. ***We agree with the advice that policymakers should consider broadening the regulatory and supervisory perimeter to include nonbank financial intermediaries as warranted, particularly those with large exposures to firms. Notwithstanding the post-crisis global financial sector regulatory architecture for both banks and non-bank financial sectors and stronger regulatory oversight, how the balance***

sheet vulnerabilities in nonfinancial companies and non-bank financial entities have reached historical standards in several large economies? Could staff throw some light on this?

- In non-bank non-insurance financials of major regions at least some of the vulnerabilities (leverage, liquidity and/or maturity mismatches and interconnectedness) increased compared to recent years. For example, in the euro area, hedge funds and structured finance vehicles increased their leverage. In China, maturity mismatches and leverage approached historical highs. In the US, leverage moved up in REITS and broker dealers.
- As we discussed in this and past reports, easy financial conditions have contributed to the build-up of corporate vulnerabilities. Aggregate corporate debt levels have risen globally, despite significant deleveraging in Europe after the crisis. In addition, credit has flown to riskier borrowers, including SMEs, borrowers in the leverage loans and private debt markets, and BBB issuers in the investment grade bond market. As Chapter 2 shows, as a result, debt-at-risk has risen as well to worrisome levels in several major economies.

76. ***We share staff's concern that the corporate bond spreads appear to be compressed relative to fundamentals due to strong demand from investors, even though corporate debts have expanded and the credit quality has deteriorated. On the other hand, the favorable corporate sector's funding condition is one of the aims and results of monetary easing. Hence, it is important to address corporate debt vulnerabilities without diminishing good effect of monetary easing. In this regard, while staff recommends a targeted approach against corporate debts, the macroprudential policy tools targeted corporate sector are limited as shown in table 1.1. Could staff elaborate more on the examples of the policy tools and analysis on the effects of already implemented tools? Staff usefully presents several actions, including emphasizing, among other things, the importance of increasing disclosure and transparency in nonbank financial markets and the oversight of nonbank financial entities. Could staff elaborate further on possible prudential tools for highly leveraged firms that could be applied in those cases where overall corporate sector debt is systemically high?***

- The report stresses that regulators and supervisors of regional banks should closely monitor and address, as needed, the sizable exposures of such institutions to potentially vulnerable nonfinancial firms and commercial real estate through adequate risk management, provisioning, and capital buffers. In addition, disclosures at nonbank financial institutions, including their exposures, should be improved.
- Finally, more countries would benefit from actively using macroprudential tools to increase their financial systems' resilience and to cool down credit growth where it may be posing risks to financial stability. Broad-based macroprudential tools (such as

countercyclical buffers) should be activated preemptively in countries where economic conditions are still relatively benign or financial conditions are still loose. Where credit developments are a concern in a particular sector, countries should conduct targeted stress tests at banks and could also consider more targeted sectoral capital buffers for banks or increase risk weights on such exposures (see the October 2014 GFSR). Countries may also consider developing prudential tools for highly leveraged firms. In France, for example, authorities tightened large exposure limits for bank credit to indebted companies.

- In countries where market-based finance plays a large role, fewer or no tools are available (see GFSR Table 1.1) and policymakers should think creatively how to tackle vulnerabilities at nonbank lenders and whether a broadening of the regulatory perimeter is warranted. In such instances, legal and institutional factors and constraints would play an important role.

GFSR Chapter 4 EM Frontier Market debt

77. ***We note that the increased investors' risk appetite for emerging and frontier markets bonds contributed to support bond issuances and narrowing credit spreads while stretching valuation of some assets from lower-rated bond issuers. Would staff recommend those countries, notably frontier markets, to seize the opportunities offered by these developments to pursue a more active liability management to lower debt service costs and improve profile?***

- The guiding principle should be debt sustainability. Countries should seek to contain their debt-related vulnerabilities, including through refinancing at lower rates if that helps reduce their debt service and improve the debt profile. Other options for debt managers include prudent debt reduction, reduction of foreign currency mismatches, reduction of reliance on collateralization, and on nonconcessional borrowing, if it comes at significantly higher spreads than concessional or multilateral debt.

78. ***We generally share the useful messages linked with the buildup of debt in emerging and frontier markets, in the current easy external financing conditions. The rising role non-financial corporations as de facto financial intermediaries in emerging markets has been growing partly accounting for the rise of corporate debt in these countries, which requires close monitoring. On SOEs, staff's recommendations are appropriate, notably on enhancing their governance. We share staff's concern regarding rising external foreign currency financing of SOEs. We would interested in staff's assessment of the drivers of the sizable decline of their profitability.***

- Our preliminary analysis indicates that the profitability of SOEs has been on a decline for more than a decade with both cyclical and structural factors contributing to the decline. The sharp commodity decline from 2014 onwards contributed to the pressures on these firms. However, they also are impacted by pricing pressures, a weaker revenue profile and a sticky cost base (for instance through higher wages and pension expenses). This is consistent with the recent IMF paper on the role on SOEs in CESEE, which concludes that SOEs have significantly lower revenue performance and significantly higher cost profile as compared with private firms. Please see also the October 2016 GFSR, which has analyzed this topic in detail indicating that the deterioration in SOEs has led the decline in the corporate profitability in EMs.

79. ***The current context makes it more difficult for emerging and frontier markets to handle sudden changes in global risk aversion and the unintended consequences of advanced economies' monetary policy. In this regard, we would welcome analysis from staff, including in the Integrated Policy Framework, regarding the potential adverse spillovers of the continued easing cycle in advanced economies to EMEs.***

- In this issue of the GFSR, we focused on how lower-for-longer yields in advanced economies could lead to higher external borrowing by EM sovereigns and firms. While easier external conditions create opportunities for financing an expansion of EMs productive capacity, a prolonged period of easy conditions could encourage excessive build-up of debt with adverse implications for debt sustainability and higher roll-over risks in the future. Countries need to be mindful of these risks and take steps to mitigate them. A more comprehensive assessment (including using the IPF), would also take into account global economic backdrop, country specific circumstances, as well as availability of policy space and policy tools to mitigate specific risks stemming from easing of monetary policy in advanced economies.

80. ***The biggest dilemma before the policymakers in implementing tighter macroprudential polices to contain financial sector vulnerabilities, arises, when the economy is already facing significant headwinds of growth slowdown and tighter regulation can further choke the credit flow to the real economy. Could staff elaborate as to how policymakers can resolve this dilemma of timing the policy actions?***

- In chapter 1 of this GFSR, we note that under these circumstances (i.e., when the economy is already facing significant growth slowdown and macro policies are being eased, but there are still financial vulnerabilities in some sectors) the authorities should use a more targeted approach rather than the broad-based macropru policies. The 2014 Staff Guidance Note on Macroprudential Policies suggests that different macropru policies may have varying impact on output growth. For example, evidence suggests that tools that target loan-to-value and debt-service-to-income are expected to have a larger impact on volume of credit than tools which work on intermediary balance sheets. Thus, the policy response would have to be calibrated taking into account the country-specific circumstances.

81. ***Could staff clarify the expected interplay between the equity outflows experienced in EMs since the first quarter of 2019, and the debt portfolio inflows, and exchange rate implications, in the near to medium term?***

- So far this year, portfolio flows to emerging markets have been resilient, despite some bouts of volatility, often related to a flaring up of trade tensions. Debt flows have generally been stronger than equity flows, reflecting lower US market interest rates (which affect debt flows more than equity flows) and a drag from trade tensions (which affect equity flows more than debt flows, in part because equity flows are more focused on Asia). Looking ahead, we expect these drivers to remain in place: equity flows are likely to remain sensitive to the US-China trade negotiations, with a resolution presenting a potential upside risk while an escalation could prompt renewed outflows. Similarly, an additional monetary easing in advanced economies could further boost hard currency debt inflows in EMs, while more hawkish signals would be a drag. EM exchange rates are likely to reflect the net effect of these and other factors.

GFSR Analytical Chapter 5 Banks' USD funding

82. ***The staff analysis indicates that the search-for-yield flows to emerging and frontier markets have been driven by external factors rather than domestic factors, which leaves countries, especially those with asset overvaluation, vulnerable to capital flow reversals. Furthermore, the interesting analytical Chapter 5 on US banks' dollar funding shows that emerging and frontier markets would be particularly vulnerable to a regulatory and supervisory tightening of dollar funding in the home countries of non-US banks engaged in cross-border dollar lending. Given all that, could staff elaborate on the extent to which improvement in domestic factors could reduce risks of capital outflows in case financial conditions tighten?***

- While Chapter 5 does not directly tackle the issue of regulatory and supervisory tightening of dollar funding and its effect on cross-border lending, we do provide evidence that factors from both lending countries and recipient countries matter for such lending. From the lending countries' perspective, our results show that alleviating USD funding fragility (i.e. lower cross-currency funding ratio, higher USD liquidity coverage ratio and USD stable funding ratio) and improving banking sector soundness (i.e. higher capital ratio, deposit ratio, and cash to asset ratio) mitigates the adverse impact of funding cost shocks on cross-border lending. Regarding recipient countries, there is evidence that cutbacks in cross-border lending is stronger to countries with higher sovereign, corporate, and banking sector risks. In addition, EM recipients are particularly vulnerable to lending cutbacks if their banking sector risk is high. For instance, when USD funding costs increase by 50 basis points, cross-border USD credit to countries in the top quintile (i.e. riskiest) group of banking sector risk takes a hit of 6 percent relative to the rest of recipient countries. Such impact is even larger (12 percent) when considering the EM recipient countries subsample.

83. ***We welcome the development of new indicators to monitor US dollar funding exposure, liquidity and stability of non-US banks. We also appreciate the proposed new indicator monitoring US dollar funding costs and the identification of the determinants of such costs. Staff comments on how those indicators perform retrospectively would be welcome.***

- Table 5.3.5 and Table 5.3.6 in the online annex present the evolution over time of the US dollar liquidity and stable funding ratios. As shown in these tables, the two fragility measures point to vulnerabilities ahead of significant US dollar funding squeeze episodes, such as the period prior to the European sovereign debt crisis when U.S. prime money-market funds (MMFs) reduced their holdings of instruments issued by euro area banks amid increasing government debt solvency concerns. The MMF withdrawal was an important shock to the ability of euro area banks to fund themselves in dollars and a large amplification of this shock could be expected given the level of the fragility measures. Regarding the USD funding costs' measure: large widenings of the cross-currency basis appeared only during the global financial crisis and the European debt crisis, as the interbank markets became impaired. According to our findings, the more recent widenings of the basis seem instead to be associated with the tightening of banks' balance sheet constraints and limited capital to fund arbitrage.

84. ***The chapter could have expanded more on whether other factors other than higher returns and the interest rate differential may account for the expansion of the US dollar funding gap. Staff's comments are welcome.***

- Examining the drivers of the funding gap would be an interesting analysis, but is beyond the scope of the chapter. Still, we would like to point to a growing academic literature trying to explain the status of the US dollar as world reserve currency. The explanations provided in He et al (2019) and Fahri and Maggiori (2018), for example, point to the superior insurance properties of U.S assets that arise from country size; the tendency to appreciate in a crisis and the role of the U.S. as primary safe asset provider. The combination of these factors might have influenced the incentive of investing in US-dollar-denominated assets and thereby the widening of the funding gap. He Zhiguo, Arvind Krishnamurthy, and Konstantin Milbradt. "A model of safe asset determination." American Economic Review 109, no. 4 (2019): 1230-62.Farhi, Emmanuel, and Matteo Maggiori. "A model of the international monetary system." The Quarterly Journal of Economics 133, no. 1 (2018): 295-355.

85. ***We appreciate the analysis of Chapter 5 on US dollar funding fragility and the potential spillovers to recipient economies. Given the limited ability of loan recipients, many of which are emerging markets, to turn to other sources of US dollar borrowings, we underscore the effectiveness of swap line arrangements between central banks, and the case for a stronger global financial safety net such as those provided through flexible credit lines. We welcome staff's comment on what they see the Fund's role to be in addressing the US dollar funding fragility?***

- In addition to supporting the existence of swap lines and calling for a stronger global safety net, the Fund can also help address US dollar funding fragilities through financial sector surveillance. FSAPs in systemically important jurisdictions have started assessing the adequacy of banking system's liquidity in US dollars, as documented in Online Box 3.1. for the cases of Japan, the euro area, Switzerland, and France. FSAPs can also be instrumental in assessing the adequacy of emergency dollar funding strategies and resolution planning. This GFSR chapter, building on efforts made in the context of the April 2018 GFSR, also developed measures of US dollar fragility that can be updated on a regular basis and be useful for multilateral surveillance. Regarding resilience in recipient countries potentially affected by the US dollar funding fragility in lending countries' banking systems, the analysis of the chapter could be useful for enriching methodologies to assess international reserves adequacy.

86. ***Staff notes that in the run-up to the global financial crisis, lending in US dollars by non-US banks became a crucial transmission mechanism for shocks originating in the major funding markets for US dollars. Regarding the policy implications, staff notes that some regulatory reforms adopted after the global financial crisis may have unintentionally made US dollar funding more prone to instability, leading to increase reliance on foreign exchange swaps and higher costs and volatility in the swap market. Although staff does not suggest that those regulatory reforms should be rolled back, it highlights the need to consider the tradeoffs involved. Could staff elaborate further on these tradeoffs?***

- Since the crisis, several regulatory reforms are thought to have increased banks' balance sheet costs of arbitrage and market making activities. Non-risk-weighted capital requirements, for instance, require banks to maintain a minimum amount of capital against all on-balance-sheet assets and off-balance-sheet exposures, regardless of their risk. As short-term arbitrage trades expand bank balance sheets when levered, they make the leverage ratio requirement more binding, despite having in general very low market risk. Another prominent example is the money market funds (MMF) reform, which led to large outflows of funds from prime MMFs to government MMFs. Dollar funding from U.S. prime MMFs in turn became scarcer and more expensive, thereby leading to a notable widening of USD funding costs. On the other hand, the chapter's discussion of the effect bank soundness as a mitigator suggests that stronger bank balance sheets—as a result of post-crisis regulatory reforms—can partially counteract the potential risks arising from US dollar funding fragility.

GFSR Analytical Chapter 6 Sustainable Finance and Fin Stab

87. ***We note the increasing consideration and integration of environmental, social and governance (ESG) principles in many portfolio investments. Could staff indicate if frontier markets' international sovereign issuances are ESG-compliant?***

- There have been very few sovereign bond issuances by frontier markets that are classified by international data providers as either green or social. For example, Nigeria issued a green bond in 2017 and Mali issued a social bond in 2018.

88. ***The potential benefits from ESG-linked investment compared to conventional investment is yet to stand out, reflecting probably the infancy of compliance with ESG principles. We take good note of the challenges faced by ESG investors and issuers, including lack of standardized and transparent assessments. We welcome ongoing international initiatives to improve ESG definition, reporting, and standardization of compliance assessment. We would appreciate staff elaboration on IMF's potential role in this regard?***

- In this GFSR, we support the efforts of the public and private sector to further spread the adoption of climate disclosures across markets and jurisdictions and to improve the comparability of financial statements' information on climate risks via an adequate degree of standardization.

89. ***Appropriate and comparable ESG standards need to be developed to prevent "Greenwashing" and to ensure that sustainable finance actually contributes to sustainable development. In this regard, while the sustainable finance expands, what kind of roles should the Fund play?***

- To address the issue of "greenwashing", in this GFSR, we support the efforts of the public and private sector to develop standards and accountability for third party verifiers, improve the comparability of ESG reporting, and reach an adequate degree of standardization of ESG product definitions.

90. ***We call for a better and more holistic approach on sustainable finance. In particular, we need to fully understand the implications of incorporating ESG-related principles, including into financial disclosure and credit rating, especially in the context of developing and low-income economies. As of now, there is no globally unified ESG standard. It is therefore important to better understand***

the challenges and the costs that these economies could face, including the rise of unfair market competition or the potential limitation on access to financial markets. We wonder whether the analytical chapter has benefitted from inputs from relevant international organizations with expertise in this area.

- In the context of preparing the chapter, the team met several international organizations including the UN PRI, the World Bank, ECB, Federal Reserve, and authorities in Asia. The team also discussed relevant market issues in an early stage with rating agencies, investors, bond issuers and other market participants.

Fiscal Monitor

91. ***We acknowledge many of the advantages of a carbon tax as set out in the paper but stress the need for domestic authorities to have the flexibility to choose instruments best suited to local conditions, both economic and political. Do staff have any plans to complement this work by looking at the effectiveness of incentives for, and financing of, carbon sequestration and capture and storage?***

- We did not explicitly incorporate carbon capture and storage technologies into our spreadsheet analysis as current evidence suggests these technologies only start to become economically viable at a carbon price of around $70 per ton (see Rubin and others 2015) and the technology is not yet proven at scale. But this is a mitigation option we should consider integrating into our modeling going forward, especially as the technology matures. How new technologies will impact investment needs and their composition could also be considered in potential extensions.

92. ***The urgency of the climate crisis calls for the deployment of all appropriate and feasible tax and expenditure measures which ensure that countries not only fulfill their nationally-determined contributions under the UNFCCC but also shift energy supply investments towards low-carbon sources. We would appreciate staff's comments whether work on assessing the carbon content of imports will be planned.***

- Staff have worked and published on issues of Border Tax Adjustments (BTA) in the past and continue to explore the issues (in consultation with SPR trade staff and the WTO). We are considering how best to contribute further to this important issue.

93. ***Staff's quantitative analysis on how a carbon tax could help achieve mitigation targets through three scenarios with rates of $25, $50, and $75 per metric ton, is helpful but the rates seem to be on the high side compared to the illustrative scenarios being considered by the World Bank on its provision of technical assistance as part of the Partnership for Market Readiness framework. In this***

context, we would appreciate staff's comment on the illustrative tax rates and whether this work is being coordinated with the World Bank.

- Fund and Bank staff are working together on refining and extending the mitigation spreadsheet tool and making it more accessible to country teams in both institutions. This should lead to more accurate assessments of prices needed in different countries to meet commitments in Nationally Determined Contributions. The spreadsheet tool also provides estimates of countries' effective carbon prices which would be needed to monitor an international carbon price floor arrangement.

94. ***We strongly welcome the Fiscal Monitor on how to mitigate climate change, as it analyses not only the efficiency of the alternative mitigation instruments but also their social and political acceptability, which are also important dimensions to consider. While we agree fiscal instruments are among the most effective means to fight climate change, we wonder how conclusive the findings are regarding the efficiency of the carbon tax compared to other alternative instruments like feebates, subsidies to new technologies and regulation. Does the analysis consider that a disruptive change in technology could significantly change the price elasticities of energy and carbon demand?***

- The analysis implicitly considers that past trends in energy-efficient technologies will continue, and that technological progress in renewables will outpace that of conventional technologies. However, it does not allow for 'step-changes' in technology in the baseline or in response to fuel price changes. Fuel price elasticities in the model are parameterized to behavioral responses in energy models and econometric literature.

95. ***The suggested shift from fossil fuels appears unrealistic and even disruptive in the near term. Could staff offer more analysis on the spillovers resulting from this on economic growth and the timelines envisaged for a non-disruptive rollout bearing in mind the different economies and scales?***

- The transition toward clean energy systems requires overcoming market failures and impediments that exist at home and abroad (Section V. and Parry et al., 2014). Underpinning this transition by market forces would accommodate higher levels of energy access for those who currently lack it; and reduce exposure to energy price volatility (NCE 2018)—all with beneficial effects.
- Kahn and others (2019) show that fighting climate change could help economic growth and climate inaction would be very costly—this involves growth spillovers from climate mitigation/adaptation. IPCC (2014) also noted that climate change would slow down growth unless enough migration policies are taken.

- Adopting mitigation policies would generate long-term benefits by ensuring a more sustainable and inclusive growth path. A low-carbon economy could generate economic gains of US$26 trillion through 2030 relative to the business-as-usual scenario, according to the analysis by The New Climate Economy (2018).
- Estimates by IRENA (2016) suggest that the total benefits (accounting for externalities of climate change) would far outweigh the cost of adopting renewable technologies by a significant margin. The shift to clean energy would reduce externalities by at least USD 1.2 trillion per year and as much as USD 4.2 trillion per year by 2030, in comparison to current policies (IRENA 2016).
- Policy action is urgently needed to curtail emissions. A less disruptive rollout would require a strategy with extensive consultations with stakeholders, legislation to provide clarity and certainty on subsequent carbon price increases, transparent equitable and productive use of carbon tax revenues, and an upfront package of targeted assistance for vulnerable households and firms.

96. ***For mitigation to work, fair burden sharing, climate lead bearing in mind cumulative historic stock of greenhouse gases and the materialization of financial and technical support cannot be wished away as we transition to climate actions. Further, global market power in both technologies and products will have an important footprint on the costs and implementation of mitigation approaches. Use of cleaner technologies or substitutes remain hampered by the intellectual property owned by just a few companies. To the extent that fiscal instruments and potential applications in Box 1.2 have been suggested to reduce the broader sources of greenhouse gases, could staff offer an analysis on the role of global market power and cost implications?***

- Global market power in technologies and products would affect the cost and widespread deployment/use of renewable technologies at the domestic and global levels. The Fiscal Monitor recognizes this obstacle and calls for supportive polices for clean technology investment (e.g., Section V. and Annex 1.9) to address potential knowledge spillovers and market distortions. Enhancing intellectual property rights at the domestic and international levels should help, as would global coordination in such efforts. An example is the innovative partnership approach of the International Solar Alliance, which consists of over 121 ‘sunshine countries’ coming together to make solar power, technology, and financing more accessible to different countries.

97. ***We welcome staff’s assessment of various mitigation strategies to reduce fossil fuel emissions; and agree that carbon taxes levied on the supply of fossil fuels is the most effective and efficient option. However, in determining the magnitude of the carbon tax, consideration should be given to revenue elasticities especially in low-emission emerging economies that are still struggling with high poverty rates. Staff comments on this are welcome.***

- The Monitor recognizes that the price elasticities may differ by energy products and by country with uncertainties (footnote 20 and second bullet on page 8). This, together with the differences in the stringency of mitigation pledges would imply that the needed carbon tax to meet countries' mitigation pledges would vary by country.
- On the other hand, countries should consider the co-benefits from a carbon tax, including both the local environmental benefits and the revenue gain. Given many low-income countries have low tax-to-GDP ratios, a carbon tax could raise significant revenues which could be used to invest in education, health, infrastructure and social protection, leading to economic growth and poverty reduction.

98. ***We would like to underscore the opportunity costs and the price implications of introducing measures such as a global carbon tax. Many SSA economies and other developing economies are likely to be negatively impacted by such measures, through reduced fossil fuel production and lower export revenues. Given these potential revenue losses, we wonder whether low emission LIDCs could be assisted to meet their renewable energy investments needs. Staff comments are welcome.***

- A shift away from fossil fuels towards cleaner energy sources will lead to long term reductions in fossil fuel demand and prices. LIDCs may be particularly vulnerable if they are dependent on fossil fuel (export) revenues. Further international coordination may be needed to ensure that climate change mitigation policies have political support from fossil fuel exporting countries. The Fiscal Monitor Annex 1.10 introduces the notion of a carbon royalty, that is, a carbon tax imposed on production (combined with consumption-based measures) – a measure that could provide incentives for petroleum producing countries to support a carbon tax agreement and ease the transition to a low-carbon future, by allowing for a more even distribution of tax revenue between net importers and exporters of fossil fuels while still achieving the same price and production outcomes. Moreover, developed countries should fulfill their commitment to mobilize US$100 billion per year in climate finance from public and private sources for developing countries by 2020, and the climate finance architecture must be strengthened to utilize these resources for maximum impact.

99. ***We agree that while carbon taxes, and to a lesser extent emission trading systems (ETS), appear to be the most efficient ways of reducing emissions, mitigation through other methods, including a more aggressive implementation of revenue-neutral feebates and regulations, could be a viable alternative option. Combining regulations with pricing mechanisms is said to increase flexibility for households and firms to find least-cost mitigation options. Could staff indicate if this approach has been adopted in any member country and yielded positive outcomes?***

- The E.U.'s combination of ETS and regulations was recently reformed in order to try to ensure cost effectiveness. In the E.U. emissions from the power sector and large industry are capped at the E.U. level under the trading system. Governments must also meet requirements for renewable energy and energy efficiency. However national level policies for renewables and energy efficiency have had no effect on emissions at the E.U. level, which are fixed by the cap, and instead have lowered the ETS allowance price. The recently reformed market stability reserve mechanism will alleviate this problem to some extent as it allows for some withdrawal of allowances from the system when there is downward pressure on the allowance price.

100. ***Recent research has suggested that carbon taxes alone might be insufficient to galvanize actions towards the removal of carbon dioxide from the atmosphere to achieve the PA targets. In this case, could staff elaborate further on the potential fiscal policy implications of implementing carbon removal strategies?***

- See response to question 1. As noted, as the technology matures carbon capture and storage could provide another mitigation option that firms may choose in response to mitigation policies such as carbon pricing, depending on cost competitiveness with renewables.

101. ***Climate action needs international cooperation to coordinate commitments and eliminate free-riding incentives in order to achieve the speed and scale necessary to meet the PA targets. Particularly for low income countries and fragile states, international cooperation is a critical enabler to make the transition to cleaner energy financially feasible. A missing piece in the analysis relates to the scale of international transfer of funds that would be warranted – given the contribution of each country to the stock of carbon in the atmosphere – and necessary to facilitate adaptation and mitigation in other countries that have a small historical contribution and high developmental needs. Can staff comment on international cooperation mechanisms that could be boosted by carbon tax initiatives?***

- Carbon taxation in developing countries—demonstrating their contribution to mitigation efforts--would help mobilize international funds, both public and private, for mitigation and thereby help to achieve commitments on finance in the Paris Agreement. The Monitor proposes a carbon price floor arrangement among large emitting countries as a complement to the Paris Agreement. This could promote trading of internationally transferable mitigation credits between countries that fall short of and exceed their mitigation commitments in nationally determined contributions under the floor price.

102. ***Can staff clarify whether there was a plan for the main chapter in the Fiscal Monitor to cover fiscal issues and risks, as pages 6, 31, and 35 and Footnote 10 of***

the WEO and paragraph 20 of Chapter 6 of the GFSR refer to issues related to climate change as Chapter 2 of the Fiscal Monitor?

- In the spring the Fiscal Monitor includes both a conjunctural chapter on the fiscal outlook, risks and policies, and an analytical chapter on a fiscal issue. In the fall, the Fiscal Monitor does not include a conjunctural chapter. This has been the practice since 2016, following cross-cutting streamlining measures as part of the FY2016-18 medium term budget.

103. ***We reemphasize that Paris Agreement on Climate Change must preserve the bottom-up approach. This means taking action locally while preserving global commons. Actions that address national circumstances and priorities should be the driver for international commitments. In addition, implementation of the Paris agreement must be comprehensive and balanced to achieve the three goals of Paris Agreement (Temperature, Adaptation, Finance flow), without sacrificing sustainable development and poverty reduction. We invite staff to clarify how this was reflected in the FM.***

- The Monitor provides a quantitative framework for helping governments understand the specific policies needed (e.g., levels of carbon pricing) to meet their voluntary mitigation commitments made under the Paris Agreement and the tradeoffs between different instruments.
- A theme of the Monitor is that acting locally in countries national interest can, up to a point, help solve a global problem. This is because cutting fossil fuel use has local environmental co-benefits like reductions in local air pollution deaths.
- The Monitor emphasizes the importance of using the revenue gain from carbon taxes efficiently and equitably to address domestic economic and social considerations. For example, carbon taxes could provide an important source of revenues for public investment and social protection, contributing to sustainable development and poverty reduction particularly in low-income countries where revenue-to-GDP ratios have been low.
- Adaptation issues, which are very important, were examined in recent IMF policy papers on *Fiscal Policies for Paris Climate Strategies* and *Building Resilience to Natural Disasters*.

104. ***In our view, focusing on CO2 emissions, whereby it only targets fossil energy, as opposed to addressing all GHGs that are emitted from different sectors, i.e. AFOLU (Agriculture, Forestry, and Other Land Use) is not appropriate. Here, staff's comments would be welcome.***

- Box 1.2 of the Fiscal Monitor discusses how fiscal instruments can be used to mitigate GHG emissions from other sectors including the agriculture, forestry, and the cement industry.

105. ***Several studies have showed that fossil fuel is needed to provide affordable energy and eradicate poverty as well as ensure access to reliable energy for many decades to come. Therefore, there is a need to find ways and means to advance fossil fuel clean technologies to achieve the Paris Agreement's overall objectives and meet Sustainable Development Goals (SDGs). Staff's comments on the Fund's efforts to cover work in this area would be welcome.***

- The Fiscal Monitor discusses how carbon pricing or other fiscal tools can provide the incentives for households and firms to shift to cleaner energy alternatives, and the additional policies needed to shift energy supply investment toward low-carbon sources. Specifically on clean fossil fuel technologies, please see responses on questions 89 and 98 carbon capture and storage above.
- On the SDGs, IMF staff has developed a methodology to assess the additional spending that would be required to reach the SDGs in areas key to growth and development, in particular, education, health, water and sanitation, roads and electricity. In the area of electricity, this work estimates the cost for reaching universal access as well as increasing per capita kilowatt consumption. When applying this methodology at the country level, it is possible to tailor the unit cost per kilowatt to take into account the energy source.

106. ***We wonder if staff intends to look at the potential implications of climate change on inflation and monetary policy?***

- There is no IMF staff publication on this specific issue, but please note that staff have been organizing a flagship seminar (with the MD's participation) for the 2019 Annual Meetings, titled "Can Central Banks Fight Climate Change?". The seminar will involve a discussion on the range of actions that central banks can take within their mandates in response to climate change. The discussion may cover also issues related to this question. For more information on the seminar, please see https://www.imfconnect.org/content/imf/en/annual-meetings/calendar/open/2019/10/16/can_central_banksfightclimatechange_147051.html.