



Independent Evaluation Office
of the International Monetary Fund

IMF ADVICE ON UNCONVENTIONAL MONETARY POLICIES

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ABBREVIATIONS

AE	advanced economy
BIS	Bank for International Settlements
BoE	Bank of England
BoJ	Bank of Japan
CBDC	central bank digital currency
CFM	capital flow management measure
CHF	Swiss Franc
CNB	Czech National Bank
DN	Danmarks Nationalbank
ECB	European Central Bank
EM	emerging market
EUR	European Department (IMF)
FCL	Flexible Credit Line
FX	foreign exchange
GFC	Global Financial Crisis
<i>GFSR</i>	<i>Global Financial Stability Report</i>
ISD	Integrated Surveillance Decision
IV	Institutional View
LTV	loan-to-value
MAE	major advanced economy
MAP	Mutual Assessment Process
MCM	Monetary and Capital Markets Department (IMF)
MPP	macroprudential policy
PBoC	People's Bank of China
PLL	Precautionary and Liquidity Line
QE	quantitative easing
RES	Research Department (IMF)
SDN	Staff Discussion Note
SDR	Special Drawing Right
SNB	Swiss National Bank
UMP	unconventional monetary policies
<i>WEO</i>	<i>World Economic Outlook</i>

EXECUTIVE SUMMARY

The Global Financial Crisis and the slow recovery from its aftermath prompted active and often innovative policy efforts over the past decade from central banks, which are only being gradually unwound. Many central banks in major advanced economies used unconventional monetary policies (UMP)—quantitative easing and new forms of forward guidance, for instance—to stimulate their economies. Central banks in smaller advanced economies pioneered novel steps such as the introduction of negative policy interest rates and exchange rate ceilings. Emerging markets felt the effects of UMP through swings in global liquidity and capital flows, to which they responded through a combination of policies: exchange rate adjustment, foreign exchange intervention, macroprudential policies, capital flow management measures and precautionary financing arrangements. Accusations of “currency wars” put a strain on international monetary cooperation. Central bank activism triggered intense debates about how best to manage monetary policy normalization; the use of UMP in future slowdowns; the design of monetary policy frameworks; and central bank governance.

The IMF’s response to these developments has been wide-ranging and in many respects impressive. Notwithstanding the considerable uncertainty and limited previous experience on which to draw in formulating advice, the Fund provided early support and validation to the major advanced economy central banks leading the way on UMP and urged aggressive use in others moving more slowly. It monitored the potential build-up of financial stability risks from UMP and helped to develop a new macroprudential policy toolkit to manage such risks, thus increasing confidence in aggressive use of UMP to meet short-term macroeconomic goals. Fund staff drew attention to and analyzed cross-border spillover through new products and techniques. Staff also reconsidered advice to countries being affected by these spillovers in a new Institutional View on managing capital flows. The IMF contributed to the G-20’s effort to encourage greater international policy cooperation and introduced new precautionary instruments to help deal with, inter alia, volatile conditions in global capital markets.

While recognizing these achievements, this evaluation also identifies shortcomings in the IMF’s engagement on UMP, often reflecting long-standing challenges that have limited the value added and influence of the Fund’s advice. The absence of deep expertise on monetary policy issues limits the Fund’s ability to provide cutting-edge advice when it is most needed, namely when central banks are contemplating novel actions in the face of unprecedented circumstances. In area departments, country teams often rotate quite quickly and engagement through the Article IV consultation is quite discontinuous, limiting familiarity with country circumstances and the building of relationships. While discussions with Fund staff are appreciated as a useful dialogue with well-informed interlocutors, country officials typically turn elsewhere when looking for expert monetary policy advice. The Fund could have done more to draw lessons from experience with UMP and—once the immediate need for both monetary and fiscal stimulus in the initial years of the global financial crisis had passed—to explore costs and benefits of alternative mixes between monetary and fiscal policies. In emerging market countries,

some members still feel that the Fund has not gone sufficiently far to appreciate the policy challenges they face from financial spillovers and volatile capital flows. There have also been long-standing limits on the IMF's traction in encouraging international policy cooperation, and challenges to designing precautionary financing instruments that attract broad interest across the membership.

The recommendations of the evaluation aim to help the IMF raise its game on monetary policy issues.

- *Build a small core group of top monetary policy experts at the IMF to keep abreast of, and contribute to, cutting-edge discussions on frontier issues in the central banking community, support institutional learning at the Fund, and provide in-depth advice to country teams as and when needed.*
- *Deepen work on the costs and benefits of UMP and related policies to develop a playbook on policy responses for use in future downturns, which may well occur in circumstances with limited scope for conventional monetary easing. Building on the IMF's comparative advantage, this workstream could draw on cross-country experience to assess and advise on the macroeconomic impact of different UMP instruments, the relative uses of monetary and fiscal policies as countercyclical stabilizers, and the roles of monetary policy and macroprudential tools to address financial stability risks.*
- *Make sure the Fund is at the forefront of financial spillover analysis and provision of advice on dealing with capital flows, drawing on its global multilateral mandate, universal membership, and breadth of country experience. The Fund's advice on dealing with volatile capital flows could be re-assessed in light of experience and changing circumstances. The recently initiated IEO evaluation on this topic could provide useful lessons for staff's work on an integrated policy framework now getting underway. The IMF's work on financial spillovers could be re-energized, including further research on how finetuning the policy mix in "source" countries could help to alleviate adverse spillovers on "receiving" countries, which would help to foster international policy cooperation.*
- *Draw on lessons from this evaluation to consider steps to deepen and enrich country engagement in bilateral surveillance. Longer tenure of mission chiefs, less turnover among country teams, more consistent handover procedures, and more engagement outside the Article IV cycle would all help develop the deeper relationships and understanding of country circumstances that are critical for providing timely, value-added advice on monetary policy and more broadly. These issues could be considered in the broader context provided by the 2020 Comprehensive Surveillance Review now getting under way.*

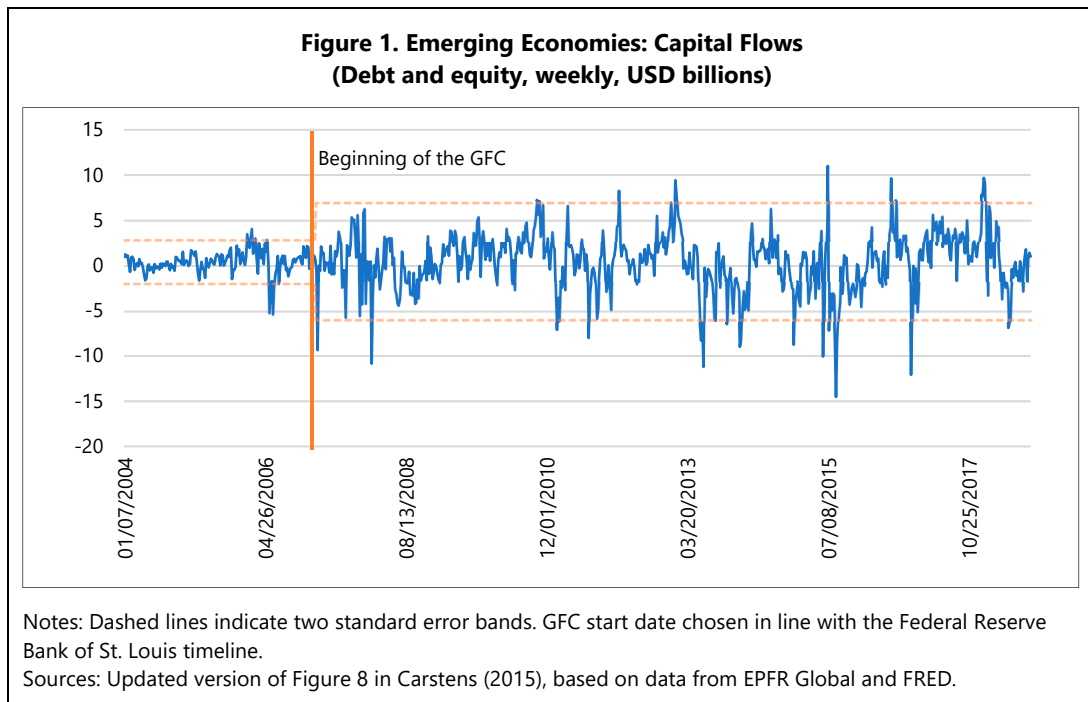
I. INTRODUCTION

A. Context

- 1. Central banks have been at the center of policy action since the start of the Global Financial Crisis (GFC).** Many central banks in advanced economies (AEs) quickly lowered policy interest rates to zero or near-zero levels and then turned to unconventional monetary policies (UMP). The term is used here to include quantitative easing (QE), forward guidance about policy interest rates, schemes to encourage bank lending, negative interest rates, and exchange rate floors.¹ The fiscal stimulus provided in the early years of the crisis was soon withdrawn, leaving central banks as the “only game in town” to support the recovery (El Erian, 2016). With persistent headwinds to growth, UMP were progressively increased in scope, and the task of unwinding their application or “exit” remains at an early stage for most UMP users.
- 2. Initial actions to support liquidity and preserve financial markets in the heat of the crisis are generally seen to have been highly effective, while later measures to support demand seem to have had a more modest impact.** For the United States, Kuttner (2018) concluded that “a preponderance of evidence” suggests that UMP succeeded in lowering long-term interest rates, which macro models suggest “are likely to have had a meaningful impact” on output and inflation. However, while the initial programs may have worked by calming turbulent financial conditions, effects of UMP seem to have diminished over time under more normal conditions “as the novelty wore off”; indeed, a number of researchers including Greenlaw and others (2018) are skeptical about the scale and persistence of the impact of QE on U.S. long-term interest rates. For other major advanced economies, Dell’Ariccia, Rabanal, and Sandri (2018) concluded that “most studies find significant cumulative effects” from UMP in lowering long-term interest rates, raising stock prices, and depreciating exchange rates. Evidence on how unconventional monetary policy affected output and inflation is “more limited” but “existing studies suggest positive impacts.”
- 3. There has been continuing debate about the risks and side effects of UMP, particularly on financial stability.** Proponents of UMP have noted that one aim of expansionary monetary policy, conventional or unconventional, is to ease financial conditions and encourage risk-taking (e.g., Lipton, 2017). Blanchard (2018) argued that the build-up in risks so far has been minimal: “some emerging market countries may have borrowed too much, but this is about it.” However, others have worried that the extent of risk-taking may end up being excessive. Caruana (2011) advised that monetary policy should “lean against the build-up of financial imbalances even if near-term inflation remains low and stable.” Some have warned that the financial stability risks are already deep-rooted because monetary expansion has lasted too long and relied too heavily on new and untried policy tools (White, 2016).

¹ As use of these measures has persisted, some observers argue that they should now be regarded as part of the conventional toolkit of central banks (Posen, 2015).

4. **The impact of UMP on other countries, particularly emerging markets (EMs), has raised concerns.** In the initial phase of the crisis, UMP stabilized financial conditions and the turnaround in demand in the major economies had a positive feedback on other AEs and EMs (Gagnon, 2015). However, many central bankers, particularly in EMs, have expressed serious concerns about the effects of subsequent rounds of UMP, when financial spillovers proved harder to manage and the growth benefits were less clear. Moreover, economies have also been exposed to volatility associated with shifts in expectations about “exit” (Tombini, 2013). Overall, large and volatile capital flows into and out of many EMs created difficult policy choices, prompting heavy foreign exchange interventions and the use of macroprudential policies (MPPs) and capital flow management measures (CFMs) (Rajan, 2013, 2015; Carstens, 2015) (Figure 1).



5. **Spillovers from UMP have raised challenges for international policy cooperation.** The G-20 took on a much more prominent role post-GFC as policymakers in the large advanced and emerging markets economies came together to respond to the crisis and subsequently debated how to take account of potentially adverse spillovers from UMP on other countries as well as persistent questions about appropriate policies for strong, sustained and balanced global growth (Rajan, 2018). However, the G-20 seems to have become a less effective forum for policy cooperation after the initial heat of the crisis passed.

6. **The use of UMP has spurred broader debates on central banking issues.** These issues will stay relevant since growth and long-term interest rates seem likely to remain significantly lower than in the “Great Moderation” period before the GFC, implying less room to use conventional monetary policy tools. Questions being considered include: (i) how best to respond to future cyclical downturns; (ii) how well the inflation targeting framework has survived the crisis

and what modifications may be needed; and (iii) whether the transparency, accountability, and governance structure of central banks needs to be strengthened so future use of UMP is subject to greater public oversight (Tucker, 2018).

7. **Over the past decade, the IMF has been actively engaged on all these aspects of UMP.** First, the Fund was a staunch advocate of UMP from the start and has successfully used its flagship publications—particularly the *World Economic Outlook (WEO)*—along with speeches by Fund management and the annual Article IV consultations with the major advanced economies to communicate this message. Second, the Fund has monitored and analyzed the financial stability risks of these policies, particularly through another flagship publication, the *Global Financial Stability Report (GFSR)*, as well as bilateral surveillance. Third, the Fund has done extensive work on the relative efficacy of monetary policy and macroprudential policies in managing financial stability risks, underpinning advice to use macroprudential tools as the first line of defense to address such risks rather than using monetary policy to “lean against the wind.” Fourth, the IMF has examined the broader issues for the monetary policy framework raised by the experience with UMP and considered the role of central banks in future periods of turbulence.

8. **The IMF has also launched a variety of initiatives to address concerns about the spillovers from UMP, particularly for EMs.** While thinking behind these initiatives sometimes pre-dated the GFC and none were intended to address exclusively concerns arising from UMP, the Fund responded quite quickly to adapt them to help EM members facing challenges from UMP in the AEs.

- A new product—the Spillover Report—was launched in 2011 to assess the cross-border impact of UMP, as well as other policies and developments.
- An Institutional View (IV) on Capital Flows was adopted in 2012 to provide “clear and consistent” advice on an expanded toolkit through which EMs could deal with increased volatility of capital flows.
- The 2012 Integrated Surveillance Decision (ISD) provided the Fund with a mandate to use Article IV consultations to raise concerns about the cross-country spillovers of countries’ policies, including UMP.
- The IMF intensified its efforts to work through the G-20 to develop commitments on policy packages (monetary and financial policies; fiscal policies; and structural reforms) that would foster “strong, sustained, and balanced” global growth, and thereby also help facilitate an exit from UMP by the major advanced economies.
- The Fund bolstered its contribution to the global financial safety net, particularly through the development of a Flexible Credit Line (FCL) to provide liquidity support to countries with sound policies affected by external shocks and volatile access to capital markets.

B. Evaluation Scope and Approach

9. **This evaluation assesses the value added and impact of this substantial volume of IMF work.** Advice on monetary policy is a core area of IMF surveillance. The IMF also has an explicit mandate to foster international monetary cooperation. This evaluation seeks to provide evidence on how well the IMF performed in these areas over the past decade (2008–18)—a time of great activism and experimentation by central banks. It addresses—among other issues—the timeliness, traction and evenhandedness of the Fund’s advice. Key questions include:

- How much value and influence did the Fund have in its advice on implementation of UMP in the AEs?
- Did the Fund staff provide central banks with an independent perspective on their policy actions?
- How helpful was the Fund in supporting countries, particularly EMs, faced by spillovers from UMP?
- What has been the contribution of the Fund in analyzing and advising on broader consequences of UMP, particularly implications for financial stability?
- How effective was the Fund in contributing to global policy cooperation, including over the mix of monetary and fiscal policies?

10. **This evaluation does not attempt to provide an assessment of the impact of UMP—domestically and cross-border—which (as indicated above) continues to be debated quite intensively.** It relies on recent survey articles’ assessments on these issues, while also recognizing that more definitive views about the efficacy of UMP will only be possible some years down the road.

11. **Nevertheless, lessons learned thus far from the experience of the past decade can guide efforts to strengthen the Fund’s capacity to conduct high quality surveillance on monetary policy in the future.** This is particularly important because monetary policy issues are likely to remain salient. In the near term, countries could benefit from the IMF’s advice on ensuring that the exit from UMP is an orderly one for both countries normalizing their monetary policy stance and countries exposed to possible spillovers. Moreover, concerns about the next downturn are now building, at a time when still low policy rates across most jurisdictions leave central banks with limited conventional ammunition. Over the longer term, the use of UMP has raised many contentious issues about central banking. Moreover, the cross-border impacts of policy decisions on capital flows and financial conditions are likely to continue intensifying in a world with increasingly integrated financial markets. The evaluation also has implications for the conduct of the Fund’s bilateral surveillance more generally to ensure value added and influence.

12. The evaluation rests on evidence and assessments provided in three thematic background papers and four papers offering detailed case studies of IMF advice to 20 countries and the euro area (see list in Annex 1).

- The three thematic papers cover: (i) IMF analysis of the risks and side effects of UMP; (ii) IMF efforts to encourage international monetary cooperation and the development of new multilateral products to help EMs; and (iii) IMF work on frontier central banking issues.
- The four papers on country experiences cover IMF advice to: (i) major advanced economies (MAE)—the euro area, Japan, the United Kingdom, and the United States; (ii) other smaller advanced economies (AEs)—Canada, the Czech Republic, Denmark, Sweden, and Switzerland; (iii) EMs in Asia—China, India, Indonesia, Korea, Malaysia, the Philippines, Singapore, and Thailand; and (iv) other selected EMs—Brazil, Mexico, South Africa, and Turkey.

13. The evaluation benefits from extensive interviews as well as review of internal and external documents. Interviews were conducted with current and former IMF staff, Executive Directors and their staff, member country authorities, particularly at central banks, experts in academia and think tanks, and financial market participants. In addition to the Article IV reports, the desk review included the IMF’s flagship publications, particularly the *WEO* and *GFSR*; policy papers prepared by staff for discussion by the Executive Board; the Spillover Reports; Staff Discussion Notes (SDNs) and working papers; and speeches and blogs by management and senior staff. The evaluation draws on material from weekly surveillance meetings organized by the Monetary and Capital Markets Department (MCM) and Research Department (RES), that were an important venue for internal debate on UMP, and on policy notes prepared in advance of Article IV consultations. It also draws on documents from other organizations such as the Bank for International Settlements (BIS) and national central banks as well as academic and think tank publications.

14. The structure of the report is as follows: Section II lays out in broad terms the IMF’s “corporate view” on UMP as it has evolved since the GFC, both related to its role in supporting growth and the IMF’s views on how to tackle the financial stability risks from the use of UMP. Section III evaluates advice on UMP to the MAE and Section IV to other AEs. Section V reviews the Fund’s advice to EMs affected by spillovers from UMP. Section VI is devoted to evaluating the Fund’s contribution to multilateral efforts to assist EMs deal with spillovers and to foster international monetary cooperation. Section VII describes the Fund’s contribution to the broader debates on central banking raised by UMP. Section VIII covers institutional issues such as the allocation of Fund staff to monetary policy issues. Section IX provides the evaluation’s findings and recommendations.

II. IMF ADVOCACY OF UNCONVENTIONAL MONETARY POLICIES

A. Use of UMP to Support Growth

15. **The IMF developed a “corporate view” on UMP soon after the start of the GFC.**

Specifically:

- (i) the Fund saw UMP as essential for recovery in the AEs undertaking these policies, and particularly so after these countries turned to fiscal consolidation after 2010, a move that the Fund strongly supported;
- (ii) the Fund judged that risks to financial stability from UMP were better managed through macroprudential policies than monetary policy; and
- (iii) the Fund assessed that overall UMP were beneficial not just for the countries undertaking them but for others as well, and that countries affected by spillovers should adjust their policies to respond to any challenges created by UMP.

Interviews with informed observers largely confirm that the Fund was successful in conveying these messages through its flagship publications, through other high-profile communication outlets such as press conferences and speeches by IMF management and senior staff, in policy papers to the Executive Board, and in bilateral surveillance, particularly Article IV consultations. Of course, these broad messages always came with caveats, but their thrust was clear and consistent.

16. **The Fund was an early supporter of UMP in the MAEs.** Statements expressing support for very accommodative monetary policies were made from 2008 onwards. In the January 2009 *WEO* update (IMF, 2009a), the Fund encouraged central banks to explore alternative policy approaches to ease policy further as policy interest rates approached zero, with a focus on unlocking key credit markets. A more far-reaching statement of Fund support appeared in a joint foreword to the April 2009 *WEO* (IMF, 2009c) and the *GFSR* (IMF, 2009b) which noted that “central banks will have to continue exploring less conventional measures, using both the size and composition of their own balance sheets to support credit intermediation.”

17. **When economic recovery remained sluggish and inflation persisted well below target, the IMF continued to support further rounds of UMP and warned that normalization should be cautious and only after inflation goals were clearly being achieved.** Statements of support were expressed in subsequent *WEOs*, quite often accompanied by advice to enhance the traction of UMP by measures to strengthen banks’ incentives to lend and households’ willingness to spend (e.g., by giving mortgage debt relief to households). These messages were reinforced in a policy paper for the Executive Board surveying recent experience with UMP (IMF, 2013b). When talk started of exit from UMP, the April 2013 *WEO* cautioned that

because inflation expectations were firmly anchored, “fears about high inflation should not prevent monetary authorities from pursuing highly accommodative monetary policy” (IMF, 2013c).

18. **The Fund advocated macroprudential policies as the first line of defense against financial stability risks from UMP.** The second part of the corporate view was that financial stability implications of UMP in the originating countries needed to be monitored but did not overturn the case for these policies, recognizing that some extra risk-taking would be growth enhancing and consistent with the goals of UMP. Several editions of the *WEO* and the *GFSR* noted that there was no evidence of excessive risk-taking but that countries should remain vigilant and use macroprudential tools rather than monetary policy to address them (see, for example, IMF, 2014d). The Fund recognized that the risk-taking could become excessive (e.g., feeding speculative behavior in housing markets) or have deleterious effects on some sectors (e.g., insurance companies and pension funds), and such risks were discussed at length in the *GFSR*. However, the overall messages were consistent with the *WEO* (Zettelmeyer, 2018).

19. **The IMF mounted an intensive effort to analyze spillovers from UMP, reaching the view that, on balance, UMP were beneficial not just for the countries undertaking them but for others as well.** The Fund recognized the possibility of adverse spillovers from UMP and, particularly after 2010, took several initiatives to address the rising concerns of EM policymakers in the face of successive rounds of UMP. The spillover reports published in 2011–15 generally supported the Fund’s prior that the positive spillover effects of UMP through beneficial effects on trade and the establishment of a solid recovery in AEs were almost sure to dominate the costs (IMF, Spillover Reports, 2011–15). Nevertheless, over time, there was rising recognition of the difficulties facing EMs from volatile capital flows and in 2012 a new Institutional View on Capital Flows (IMF, 2012c; 2012e) was approved to provide coherent advice on addressing these challenges.

20. **After its strong support for a global fiscal stimulus in 2008–09, the Fund generally supported a turn to consolidation, while continuing to urge accommodative monetary policies (Box 1).** At the start of the GFC, the Fund initially pushed hard through the G-20 to get agreement on a global fiscal stimulus as part of a comprehensive response to a global recession. By 2010, as the recovery appeared to take hold, the IMF lent its support to the G-20’s Toronto Declaration setting ambitious goals to wind down the fiscal stimulus in order to safeguard medium-term public debt sustainability. The *WEO* update of January 2011 (IMF, 2011a) emphasized the urgency of moving toward more sustainable fiscal paths across the AEs, while advising that “at the same time monetary accommodation needed to continue.” When the recovery turned out to be more sluggish than expected, the IMF modulated its message, advising countries with fiscal space to use it and those without to make any fiscal consolidation as “growth friendly” as possible, but it continued to put primary emphasis on monetary policy for managing demand.

Box 1. IMF Advice on the Monetary-Fiscal Policy Mix After the GFC

The GFC elicited an unprecedented monetary and fiscal policy response. The G-20 AEs at the epicenter of the crisis saw their average primary fiscal deficit in structural terms move from 1 percent of GDP in 2007 to 5 percent of GDP in 2010, including in response to coordinated commitments by the G-20. As the effects of the crisis spread, the fiscal positions of many EMs also deteriorated, with the G-20 EMs' average structural primary balance moving from a surplus of 1½ percent of GDP in 2007 to a deficit of 1½ percent of GDP in 2009. In the following years, the stimulus was largely withdrawn in the AEs. By 2014 the average structural fiscal deficit among G-20 AEs had shrunk to a mere 1¼ percent of GDP. By contrast, structural primary deficits in G-20 EMs remained more elevated partly reflecting the collapse in global commodity prices.

Early calls for fiscal stimulus: The IMF was among the first to call for fiscal stimulus (Dhar, 2014). In November 2008, it urged G-20 countries to expand their fiscal positions by 2 percent of GDP in structural terms. In these early years of the crisis, the IMF urged that all demand policy levers be eased aggressively to avert a deep downturn in global activity. However, the Fund's advocacy for stimulus was typically couched in terms of the eventual need for exit.

Subsequent calls for fiscal consolidation: In most countries the initial stimulus coupled with the fiscal impact of the economic downturn and banks' bailouts, propelled public debt ratios to post-war highs and markets became concerned that public debt was increasing rapidly in many countries. With signs that the global recession may have troughed, the Fund shifted decisively in its 2009 Principles for Policy Exit to a call for fiscal consolidation, leaving to monetary policy the task of stimulating further if needed (G-20, 2009). The G-20's Toronto Declaration in June 2010 called for a halving of advanced economy fiscal deficits by 2013, a position that was echoed in the Fund's bilateral policy advice. The preference for fiscal consolidation was reinforced by periodic shocks to market confidence in government solvency, especially in the euro area and among some EMs, which caused sharp spikes in sovereign bond spreads.

Austerity and fiscal multipliers: In the initial phases of the crisis, the Fund's fiscal policy advice for stimulus was largely predicated on the basis of existing estimates of fiscal multipliers (mostly well below one), implying a modest impact. However, these estimates did not account for the fact that the effect of fiscal policy varies with the state of the business cycle or with proximity to the effective zero lower bound for monetary policy. As consolidation began and recoveries came to a halt, concerns arose inside and outside the Fund that multipliers may be large and state-dependent for economies still operating below potential. Hence, fiscal consolidation risked pushing debt-to-GDP up instead of down because of the extent to which it slowed growth (Batini, Callegari, and Melina, 2012; Box 1.1 in IMF, 2012d; and Blanchard and Leigh, 2013).

Increased focus on fiscal space and growth-friendly consolidation: As growth remained tentative, and beliefs about the impact of demand policies were being reassessed, the Fund started to concede that, in some cases, fiscal consolidation could be slowed or reversed. This shift in advice called for a consistent metric with which to measure space for fiscal support, which was particularly useful for advising euro area countries where budget rules seemed to generate stark growth trade-offs. This quest culminated in a staff paper designing a common tool for assessing fiscal space in IMF surveillance, based on cyclical and fiscal indicators as well on fiscal stress tests (IMF, 2016e). When recommending stimulus or consolidation, Fund staff paid increasing attention to the timing and composition of fiscal packages in order to make sure these maximized positive and minimized negative growth effects while spreading the social costs more broadly, with a specific focus on the long-term consequences of fiscal action (Gaspar, Obstfeld, and Sahay, 2016).

Assessment

21. **The Fund deserves considerable credit for quickly developing an overall view on UMP and articulating it consistently and clearly.** From the vantage of 2019, it does seem that the Fund was fundamentally right to support quick and aggressive actions by the major central banks to fight against global recession in the wake of the GFC, notwithstanding the limited

previous experience on which staff could draw. Even among observers who disagreed with the Fund's calls, there was appreciation that "it was clear where the Fund stood."

22. **Views are more critical about the value of IMF analysis and advice on the implementation of UMP, about its risks and side effects, and on its effects on other countries and implications for the international monetary cooperation.** Despite its strong advocacy of UMP, AE officials generally felt that the Fund was not at the forefront of analysis of how well these policies were working and how they could be reinforced. With the benefit of hindsight, the Fund may also have been too ready to support a quick pivot to broad-based fiscal consolidation, despite the extra burden this put on already stretched monetary policy instruments. Moreover, there remains a sense among many EM officials interviewed for this evaluation that the Fund was ready to support central banks in AEs to do whatever was needed to heal their own economies, while being hesitant to recognize political constraints and to support unorthodox measures by EMs to deal with the challenges of increased volatility through financial channels. These and other topics are taken up in depth in the remainder of the report.

B. Risks and Side Effects from UMP²

23. **Multiple concerns have been expressed about possible risks and side effects from UMP that have amplified as these policies have been extended in depth and duration.** First, while UMP could be effective in enhancing monetary stimulus, exit could be difficult and costly for the countries undertaking UMP and could also impose costs on other countries. Second, while UMP may have helped to close current output and inflation gaps, it could raise the likelihood of future gaps by raising the odds of a financial crisis. This concern is particularly salient where there is a build-up of vulnerabilities in the housing sector given the role that stress in this sector has played as a trigger for financial crises in the past. Third, while UMP may have helped close output gaps on average, it may do so by helping some and hurting others, viz., it may have distributional effects that could exacerbate inequality, particularly of wealth.

24. **Over the past decade, IMF adopted the view that MPPs were greatly preferable to monetary policies in managing financial sector risks, including those arising from UMP.** Prior to the GFC, the IMF had devoted attention to the issue of how monetary policy should deal with financial stability risks in an environment of low inflation (see for example, IMF, 2000). The IMF did not rule out "leaning against the wind," i.e., raising interest rates to counter a sharp rise in asset prices even when there was little evidence of inflationary pressures. But it warned that such action should not be taken lightly: several conditions were specified that would need to be met and it was recognized that technical and political difficulties could come in the way of taking pre-emptive policy actions. The IMF's view that while the use of interest rates to tackle asset price booms should not be ruled out, it should not be the first resort, was widely shared among central banks.

² This section draws on Turner (2019), Rebucci and Zhou (2019), and Monnin (2019).

25. **With the onset of the GFC, and the urgent need to use monetary policy for meeting output and inflation goals, the IMF moved in a consistent fashion on three fronts.** First, it threw its intellectual and policy weight behind advocating even more strongly that monetary policy should focus on macroeconomic goals and assign the responsibility of maintaining financial stability largely to other policies, particularly MPPs.³ Second, it worked hard to develop a framework for making MPPs “the first line of defense” against financial stability risks, including those stemming from UMP. Third, it built up its capacity to monitor and analyze global financial risks, notably in the *GFSR*.

26. **The Fund’s view on *Monetary Policy and Financial Stability* was laid out in a 2015 policy paper which posed the question of “whether monetary policy should be altered to contain financial stability risks” and concluded that the “the answer is generally no” (IMF, 2015a).** The paper observed that tightening monetary policy would have fairly certain immediate costs from lower output and inflation (if it fell below target) while the benefits would materialize mainly in the medium term (as financial risks are mitigated), and were more uncertain. It argued that in most circumstances the upfront costs outweighed the benefits and thus “based on current understanding and circumstances, the case for leaning against the wind is limited.” It suggested that when there was substantial slack in the economy, the evidence was that transmission from easy monetary policy to financial risks was weak and the implementation hurdles of using monetary policy to contain these risks were substantial. In contrast, macroprudential policies could target imbalances and market imperfections much closer to their source than monetary policy. This division of labor would allow monetary policy to focus on its macroeconomic goals, thus simplifying communication and enhancing accountability.

27. **Having proposed macroprudential policies as the first line of defense against financial stability risks, the IMF has spent considerable effort on advising on the proper use of these policies.** The 2012 Policy Paper “The Interaction of Monetary and Macroprudential Policies” noted that the latter could be used to build up buffers when financial conditions are easy and then used to keep banks and other intermediaries healthy during periods of financial distress, helping to preserve the effectiveness of monetary policy in financial downturns (IMF, 2012f; 2012g). MPPs could also be adapted to counter unwanted side effects from expansionary monetary policy, which may be particularly important when interest rates are close to zero and the temptation to seek higher leverage is strong. The IMF has developed a database of MPPs taken by countries (Alam and others, 2019), prepared a guidance note to staff on the use of MPPs (IMF, 2014e), and carried out cross-country studies of the effectiveness of these measures both in-house and in collaboration with other agencies (FSB, 2016).

28. **The IMF has placed particular emphasis on using macroprudential policies to manage risks related to house price booms (IMF, 2014e).** Limits on loan-to-value (LTV) ratios, caps on debt service-to-income ratios, and sectoral capital requirements have been the most commonly recommended measures. IMF researchers have also devoted considerable attention

³ See, for example, Quint and Rabanal (2014).

to studying the effectiveness of such policies (e.g., Zhang and Zoli, 2016; Cerutti, Claessens, and Laeven, 2017).

29. **While generally supportive of macroprudential measures in the housing market, Fund staff have been less welcoming of some measures that discriminate against foreign residents.** A Board paper sought to lay out the basis for staff's classification of measures into three categories: MPPs or MPMs, CFM, and CFM/MPP, with the last category referring to "policy tools designed to limit capital flows and to reduce systemic financial risks stemming from such flows" (G-20, 2018). Countries using measures classified as CFM, including measures that discriminate against property purchases by foreigners, are advised that these measures be scaled back or maintained only on a temporary basis, consistent with the IV.

30. **More recently, as the global economy has needed less immediate demand support, the IMF has been open to recalibrating its views on the relative roles of macroprudential and monetary policies in managing financial stability risks.** The 2015 Policy Paper noted that many experts, including at the BIS, favored "a stronger role for monetary policy in maintaining financial stability" and concluded that the Fund's position should be kept under review as knowledge of the relationship between monetary policy and financial risks evolves and as circumstances change. Recent and ongoing work at the IMF has re-examined the relationship in the context of a global economy in which output risks have been less pressing. For example, Adrian (2018) studied the role that monetary policy can play in lowering the downside risks to GDP and suggested that monetary policy should "lean slightly against the buildup of [financial] risk when the economy is close to potential." In general, Fund staff's recent work has recognized that optimal monetary policy depends "not only on the output gap and inflation, but also on financial conditions" (Chapter 6 in Adrian, Laxton, and Obstfeld, 2018).

31. **The Fund has fostered discussion of the distributional effects of UMP and MPPs, although its own analytical contribution has been limited.** As concerns about the distributional impacts of UMP became prevalent in policy circles and the media (Coeuré, 2012; Stewart, 2011), the IMF convened high-level discussions on the distributional impacts of monetary policies at the 2012 Annual Research Conference (Zhu, 2012). However, the Fund staff has done little analytical or empirical work of its own and has not taken a public position on whether distributional effects of UMP are of concern or how to respond if they are.

Assessment

32. **The Fund's view on the financial stability risks of UMP was clearly articulated and is generally regarded as having provided the right message at the time it was given most forcefully and a valuable contribution to the international discussion on the topic.** In retrospect, the overall approach seems to have been well founded as a basis for policy advice in the post-GFC period. The Fund's policy assessment and advice was supported well by its multilateral surveillance of global financial risks, particularly the *GFSR* which is now widely recognized as a world leading product (IEO, 2019). The IMF's 2015 paper on the topic was

considered by many outside experts as nicely summarizing the arguments for the view and helping to propagate it. IMF mission chiefs were generally appreciative of the framework as useful in guiding their discussions with authorities, though a few felt it was too constraining in not acknowledging that simultaneous use of macroprudential tools and modest tightening of monetary policies might sometimes be more effective than just using the former.

33. **Complementing its support for UMP, the IMF has been at the forefront of international efforts to develop and assess new MPPs.** The Fund's detailed knowledge base on the design of MPPs is generally viewed by policymakers as providing high value added and having considerable traction. Senior policymakers and financial experts appreciated the IMF work on quantifying the effects of MPPs. While other institutions such as the BIS have also made strong contributions, the IMF has become an international clearinghouse for evidence on how different instruments have been designed in different countries and how well they are working.

34. **The Fund's view that the financial stability risks of UMP were not sufficiently serious to undermine the case for these policies seems at this juncture to have been well founded, although it remains to be fully tested.** The Fund's judgment that these risks were not serious enough to undermine the pressing case for UMP is widely shared among policymakers and academic experts. However, those who had expressed concerns about such risks still feel that the adverse effects of UMP remain below the surface although they have not yet manifested themselves; in their view, therefore, it is too soon to conclude that the Fund's judgments have been proven correct. There has also been concern about the financial stability risks as countries exit from UMP. The IMF's openness to recalibrating views as balance of risks shifts is welcome.

35. **The IMF has appropriately voiced concerns about house price booms in some countries.** Given the importance of the housing sector for financial stability, Fund staff have worked with authorities in many countries to analyze developments in the sector and the needed policy response. Interviews conducted with authorities for this evaluation provide many examples—among them Canada, France, Germany, Korea, and the Netherlands—where staff work on housing markets was valued by the authorities. The 2013 cluster report on Nordic housing markets was also considered very useful (IMF, 2013e). The IMF also deserves credit for the extensive effort on compiling a database on the use of macroprudential policies to manage housing sector risks, on the detailed operational guidance provided to country teams on appropriate policies, and on the analytic work on the effectiveness of these policies. Although much of the analysis over the past decade was conducted by individual country teams with infrequent knowledge sharing over the past year there has been greater attention to cross-country work on housing issues, with the recent *GFSR* analyzing downside risks to house prices (IMF, 2019).

36. **The IMF has played more of a convening role than a research or advisory role in assessing the distributional impacts of UMP.** This seems surprising given the active research underway at the Fund over the past decade to study the distributional impacts of many other economic policies and the considerable attention that has been paid at major central banks on

this issue. Given the other tasks confronting the IMF over the past decade—and the prevailing consensus that monetary policy easing reduces inequality by supporting employment—this does not seem a huge failing. However, since future political and public support for future UMP could well depend in part on perceptions of their distributional impact, the IMF could have been more active on this front (Voinea and Monnin, 2017). Some senior officials also emphasized the need for Fund awareness of the distributional effects of macroprudential policies if it intends to keep them as the first line of defense against financial stability risks. These officials noted that many macroprudential measures have disproportionate impacts on certain groups (e.g., the impact on first-time home buyers from caps on LTV ratios on mortgages), undermining the political support for such measures even though they may be critical for financial stability considerations.

III. ADVICE TO MAJOR ADVANCED ECONOMIES⁴

A. Context

37. **After cutting policy interest rates to zero (or near-zero) after the onset of the GFC, the Federal Reserve and the Bank of England (BoE) quickly moved to UMP.**

- The Fed launched four QE programs between 2008 and 2012, which it started to unwind in 2015. In addition, the Fed used various forms of forward guidance to signal that policy interest rates would remain low for an extended period. In May–June 2013, statements by the Fed chairman that it would start to reverse these policies surprised markets, leading to the “taper tantrum,” a period of market volatility with considerable impact on EMs. Learning from that episode, the Fed has been careful to communicate clearly about its exit strategy, emphasizing that it would follow a gradual and data-dependent approach. When exit began in 2015 there was little market reaction, although subsequently there have been bouts of volatility associated with shifts in market perceptions about the Fed’s likely path.
- The BoE’s actions were somewhat similar to those of the Fed, but it also launched an ambitious scheme to directly encourage bank lending to companies and households. The BoE launched QE in 2009 after cutting policy rates to 0.5 percent—which it perceived as the effective lower bound. There were three rounds of QE between 2009 and 2012 and active use of forward guidance in 2013–14. The BoE undertook an additional round of QE in 2016 after the “Brexit” referendum in which the U.K. voted to leave the European Union.

38. **After targeted steps in 2008–12, the European Central Bank (ECB) aggressively eased policies more broadly starting in 2013 in the face of a sluggish recovery.** The ECB’s actions in 2008–09 were focused on support for the banking sector, and over 2010–12 on purchasing government bonds issued by the euro area “crisis countries.” In the first half of 2011, the ECB even raised policy interest rates but had to reverse course when economic recovery stalled in the second half of the year. Starting in 2013, the ECB used forward guidance,

⁴ This section draws on Ball (2019).

introduced negative interest rates, and launched a large-scale asset purchase program, as well as introducing multiple schemes to provide low-cost funding for bank lending (IMF, 2013f).

39. **After acting less aggressively than the other major central banks, the Bank of Japan (BoJ) launched a strong program of monetary policy easing in 2013.** In contrast to the other MAEs, Japan had already endured a long period of low growth and inflation before the GFC, and policy interest rates were already at 0.5 percent. Through 2012, the BoJ mainly relied on forward guidance and limited asset purchases. The response became much more forceful and coordinated after the election of Prime Minister Abe, with the BoJ launching “quantitative and qualitative easing” programs, adopting a 2 percent inflation target and the government announcing a package of fiscal support and structural reforms. In 2016, as outcomes remained disappointing, the BoJ introduced negative interest rates and yield curve control.

B. IMF Advice

40. **The Fund’s advice on UMP in the major advanced economies followed the “corporate view” laid out in Section II calibrated to the circumstance of the economy and the policy actions of the central bank.** Thus, for the U.S. and U.K., the Fund was for the most part in a supportive role, generally endorsing central bank decisions and discussing the path ahead. For the euro area and Japan, the Fund pushed for a more aggressive approach by the central banks at times when the Fund perceived them as not doing enough to support recoveries or counter risks of entrenched low inflation.

41. **In the United States, the Fund expressed strong public support for the Fed’s actions while also stressing the need to unwind these policies once there was assurance of a firm recovery.** Specifically:

- During 2009–11, while the Fund supported the launch of each new Fed program, it also consistently emphasized the need to unwind these extraordinary policies soon. The Fund underlined the need to pivot quickly to fiscal consolidation and for a credible medium-term fiscal strategy. To some extent, the Fund’s focus on exit was influenced by its interactions with the G-20, which had tasked the Fund with thinking about “exit principles” as early as 2009. In addition, the Article IV reports sometimes included elements that were implicitly hawkish: discussions of limits on the scope for further monetary easing; the financial stability risks of low interest rates; and the role of structural factors in explaining high unemployment.
- Over 2012–14, there was more convergence in tone between the Fed and the Fund. And by 2015–16, the staff had shifted to advocating policies that were somewhat more dovish than the Fed’s, especially in 2016 when the staff advocated an overshoot of the 2 percent inflation target.

- The Fund has generally supported the Fed’s strategy for unwinding QE, emphasizing the importance of clear communication. Recently, it raised concerns that the fiscal stimulus provided through the 2018 tax cut package could require a more rapid tightening of the monetary policy stance than otherwise.

42. **In the U.K., the Fund and the BoE’s views were generally closely aligned.** The views on monetary policy actions expressed in U.K. Article IV reports were typically very close to those of the majority of the BoE’s Monetary Policy Committee even though at times there were significant differences of views within the Monetary Policy Committee itself. One striking example of the congruence of staff and BoE views was on the effective lower bound. The BoE did not reduce the policy rate below 0.5 percent out of concern that lower rates would have an adverse effect on mortgage banks. This policy was supported without much probing by Fund staff, even after other central banks started moving to negative interest rates.⁵ An example of the IMF encouraging the BOE to do more occurred in 2012, when staff came out in favor of the credit easing measures that were being debated within the BoE at the time. On policy mix, the Fund generally supported the commitment to fiscal consolidation as necessary, but at times also urged for flexibility on the path to avoid posing an excessive drag on growth and adding to the burden on monetary policy.

43. **In the euro area, the Fund encouraged more aggressive monetary policy easing, including an earlier move to QE.** Faced with a wide divergence of views on the need for monetary stimulus among member central banks within the euro area and the ECB’s governing council during 2012–13, the Fund came down on the side of those advocating greater stimulus. This was not the consensus view at the ECB at the time, and the Fund ended up playing a considerable role in debates on both the broad stance of policies and the operational details, both inside the Bank and in the public discussions. Since 2014, ECB and staff views have been more closely aligned as the ECB has moved to phase in asset purchases. The Fund supported the turn to fiscal consolidation from 2010, while from 2013 onwards also calling for use of space within the SGP to avoid any excessive drag on growth in response to increasing concerns about lack of growth momentum (IMF, 2014b).

44. **In Japan, the Fund has consistently urged the BoJ to undertake aggressive monetary policy easing.** Until 2012, Fund staff were critical of the BoJ’s reluctance to ease more strongly, arguing that the BoJ was too sanguine that its current policy would be successful in ending deflation soon. In 2013, the Fund was a cheerleader for Abenomics and strongly supported the government’s strategy, including the BoJ’s adoption of quantitative and qualitative easing. However, by 2015, staff had become nervous about the progress of Abenomics, and again pushed the BoJ for more action. The Fund’s position was particularly forceful in 2016—the Fund advanced a broad agenda to “reload” Abenomics with a stress on incomes policies as a way of boosting inflation. The Fund lent its support to the BoJ’s adoption of negative interest rates and yield curve control in 2016 while continuing to call for incomes policies. Fund staff often gave fairly detailed prescriptions about the easing tactics that the BoJ should use, even more so

⁵ The 2012 Article IV report (IMF, 2012b) did question the 0.5 percent lower bound.

than in the case of the ECB, and closely monitored the status of previous staff recommendations. On policy mix, the Fund supported the Abenomics stimulus package in 2012—but also the tax hike in 2014 contained in the official medium-term strategy—even though the boost to growth under Abenomics was less than hoped.

C. Assessment

Advice on UMP

45. **Bilateral advice from the Fund on UMP was generally regarded by officials as useful validation of their actions and as being particularly influential at the ECB.** Officials in the major AEs view the Article IV process as generally providing a valuable discussion of their policy framework with respected, well-informed interlocuters. For the Fed and BoE, the Fund’s public support of their UMP was valued for fostering broader acceptance of unorthodox central bank policy initiatives; this was particularly so in the U.K. case where the IMF’s views draw greater public attention than in the United States. Neither felt that the IMF advice had been ahead of the curve nor had introduced novel ideas, but this was not regarded as surprising or problematic given that these central banks had moved quickly and could draw on their own deep expertise and experience. The Fund had played a more influential role in the euro area where current and former ECB officials give considerable credit to Fund staff in helping them think through some of the design features of QE and building the case for it with governing council members. Officials noted quite frequent interactions not just confined to the consultation cycle, the close relationship with a long-serving mission chief, and the impact of an IMF staff blog on the danger of “low-flation” (Moghadam, Teja, and Berkmen, 2014). As with the ECB, the Fund also urged the BoJ to act more quickly and aggressively, but interviewees felt that the BoJ’s eventual adoption of these policies was more the result of the change in the political environment than an indication of the Fund’s influence with the BoJ.

46. **Officials regarded the Fund’s multilateral products as very helpful in assessing global developments and policies needed for strong global growth.** There was near-unanimous appreciation among interviewees for the value of the Fund’s multilateral flagships. Though all the MAE central banks have a well-staffed international division that follows the global economy, the Fund’s breadth of coverage of global developments, its cross-country work, and technical support for the G-20’s work on ensuring strong global growth were regarded as its comparative advantage. Officials, particularly at the ECB and BoE, noted that the Fund’s influence on them works as much through its multilateral research and analysis as through the bilateral consultations.⁶

⁶ One example was the 2009 *WEO* chapter (IMF, 2009c) showing that recoveries after financial crises tend to be slower than other recoveries, which played a role in the BoE Monetary Policy Committee’s thinking on the appropriate monetary policy stance.

47. **While valuing the Fund’s cross-country work in general, officials were less favorably inclined towards the discussion of the likely spillovers of their policies during the Article IV consultations.** There was agreement that the analysis of spillovers was part of the core mandate of the Fund, but the presentations of the spillover reports during the Article IV consultations were not considered very useful and tended to over-burden the process, an opinion shared by some IMF mission chiefs. Fed officials noted that they had done their own extensive work on cross-border impacts of their policies, recognizing the need to take adequate account of spillbacks onto U.S. conditions, and that there are regular discussions with Fund staff on spillovers through other channels such as workshops and conferences.

Advice on policy mix

48. **While the IMF Article IV process aims for a holistic view across the macroeconomic policy framework, the Fund could have focused more on thinking through policy trade-offs between UMP and other policies.** In the immediate aftermath of the crisis, and again with Japan in 2012–13, the Fund was a strong proponent of fiscal stimulus as part of an all-in approach to support demand. Otherwise, the IMF generally adopted a cautious approach on fiscal stimulus while supporting further monetary support as needed. In particular, the Fund’s support of the turn to consolidation in 2010 was consistent with an orthodox view of the paramount importance of ensuring fiscal sustainability. In retrospect, the Fund could have done more to explore the trade-offs involved, given that a more rapid fiscal retrenchment would place greater burden on monetary policy to support demand, at a time when monetary policy was running out of ammunition (Dhar, 2014; Orphanides, 2017). Moreover, an “easy money/tight fiscal” policy mix also implied larger adverse cross-border spillovers through exchange rate and capital flow effects. As economic recovery remained sluggish, the Fund nuanced its message, noting that putting in place a credible medium-term strategy for fiscal consolidation could alleviate the need for upfront adjustment and urging countries to use their fiscal space and to make the needed adjustments “as growth-friendly as possible” (Lipton, 2012). Nonetheless, the overall fiscal message remained predominantly hawkish.

IV. ADVICE TO SMALLER ADVANCED ECONOMIES⁷

A. Context

49. **Very liquid international market conditions generated by UMP of the major central banks led other AEs to take innovative monetary policy actions.** Denmark was the first to adopt negative interest rates (a move later emulated by Sweden and Switzerland), the Czech Republic and Switzerland introduced exchange rate floors, and Canada and Sweden went in different directions on the use of monetary policy to address financial stability risks.

⁷ This section draws on Everaert (2019) and Honohan (2019).

50. **The Danmarks Nationalbank (DN) pioneered the introduction of negative policy interest rates in response to surging capital inflows.** In 2011–12, market fears about euro area break-up induced large flows into Danish krone-denominated assets, threatening the hard peg with the euro that the authorities were determined to maintain. When the ECB deposit rate was lowered to zero in July 2012, the DN followed by lowering its repo rate to –0.2 percent. This was the first time any central bank had posted negative policy interest rates. The DN lowered its policy rate again to –0.75 percent in early 2015 when removal by the Swiss authorities of their exchange rate floor led to renewed speculative pressure on the DKK. When inflows continued, the Danish authorities adopted a more aggressive and open-ended intervention policy, combined with an announcement that they would cease issuing government bonds, which had the desired effect of reversing the capital flows.

51. **The Swiss National Bank (SNB) faced sustained downward pressure on consumer prices amid strong capital inflows and it responded in September 2011 by announcing a “floor” on the value on the Swiss franc (CHF)/euro rate to help maintain price stability.**⁸ At the start of the GFC, safe-haven seeking capital inflows pushed the euro value of the CHF progressively higher, despite countervailing action by the SNB, including a sharp initial reduction in policy interest rates, outright purchases of domestic bonds, and currency intervention. When the CHF surged almost to parity with the euro in August 2011, the SNB decided on a dramatic change of regime, announcing a floor of 1.20 on the CHF/euro rate and committing to unlimited interventions to defend this floor, which remained in effect for over three years.

52. **The Czech Republic also innovated in its exchange rate policy in the face of concerns about deflation with policy interest rates having already been at the effective lower bound for some time.** The Czech authorities lowered their policy rate to near zero by November 2012. When inflation did not recover, and the outlook was towards more deflation, the Czech National Bank (CNB) adapted its floating rate regime to introduce an exchange rate ceiling in November 2013, declaring this to be an “additional monetary policy instrument,” rather than a target, which remained the inflation rate. The introduction of the ceiling, accompanied by massive interventions in the amount of approximately 7.5 billion euro, led to an initial depreciation of about 5 percent. With inflation coming back on target, exit from the ceiling was accomplished smoothly in April 2017. The subsequent appreciation of the currency has not been excessive.

53. **A key issue in Sweden was balancing its inflation targeting framework with financial stability concerns.** Following a path different from other central banks, the Riksbank tried to manage financial stability risks by gradually tightening monetary policy during 2010–11. The Riksbank board decided that, despite high unemployment and low inflation, interest rates must be raised for “longer-term considerations,” namely, financial stability concerns arising from a credit-fueled boom in the Swedish property market. However, the appreciation of the krona

⁸ The term “floor” reflects the convention according to which the exchange rate is quoted in CHF per euro, thus imposing a floor means to place a maximum value on the CHF.

and weakness of the euro area economy began to take a toll on the Swedish economy, and inflation kept coming in below target and below forecast. The Riksbank reversed course in July 2014 by cutting the policy rate and it moved to negative interest rates in early 2015. Inflation, which had dipped to zero or below, began to return towards the target, reaching 2 percent by early 2017.

54. **In contrast to the Swedish approach in 2010–13, Canada has consistently chosen to use macroprudential policies instead of monetary policy to manage financial stability risks.** During 2010–17, Canadian agencies tightened macroprudential policies related to the housing and credit markets. Key measures included tightening standards for government-backed insured mortgages (which cover the bulk of mortgage lending) and capping debt service-to-income ratios for mortgage lending. More recently, some provinces introduced property transfer taxes on non-residents to deal with perceived speculation and support affordable housing in certain large city markets. Monetary policy has not been considered as a tool to actively lean against the wind and would only be brought to bear if all other options were exhausted (Poloz, 2015).

B. IMF Advice

55. **IMF engagement with these five countries under review varied considerably in depth and content.** Given their smaller size and more limited systemic reach, advice was largely through bilateral surveillance, particularly the Article IV consultation, and received less attention in multilateral surveillance or high-level Fund-wide processes.

56. **IMF staff reacted after the fact to the novel Danish monetary policy actions, and attention to monetary policy issues remained comparatively light.** There was limited interaction between DN and IMF staff in advance of the introduction of negative rates, and subsequently the Fund's role was largely one of validation. The Policy Notes for Article IV consultations did not emphasize monetary policy issues and were matter-of-fact about the introduction of negative interest rates. In the 2012 Policy Note, staff remarked that "the negative interest rate policy is new and little experience has been accumulated, so any policy recommendation would be tentative. A note on this topic is planned for the SIP."⁹ The 2012 Article IV Report (IMF, 2013a) devoted less than half a page to monetary policy in this environment and the Nordic Regional Report published by European Department in 2013 (IMF, 2013e) devoted almost no attention to monetary policy issues. Not until 2014 did the Article IV report attempt a broader assessment of UMP-related issues in Denmark. However, within months of that report, Denmark's UMP strategy was challenged again by the Swiss floor exit (IMF, 2014f). There is no evidence of the Fund discussing contingency planning for Denmark monetary policy in response to a potential Swiss exit. The government debt management announcement was, for example, entirely homegrown.

⁹ Batini and others (2013) explored briefly some of the technical aspects of negative interest rates.

57. **Engagement with the Swiss authorities on their use of the exchange rate “floor” was more intense.** The SNB did consult the Fund on a range of possible policy options prior to introducing the “floor” in September 2011. After the event, a key challenge for the Fund was to decide whether to support the SNB’s action to put a limit on the exchange rate’s appreciation at a time of a large current account surplus, which led to external criticism.¹⁰ In the end, IMF staff judged the “floor” to be an appropriate response to ensure price stability and deter capital inflows and not an attempt to manipulate the currency for competitive advantage. The Swiss authorities pointed to a number of distinctive features of the Swiss economy that tend to swell the current account surplus and Fund staff have given Switzerland the benefit of the doubt on this matter, noting that the insensitivity of the Swiss current account surplus to large fluctuations in the exchange rates suggests that special factors are at play. The staff position was supported by the fact that the Fund’s external balance assessment pointed to the CHF being overvalued rather than undervalued.

58. **IMF staff also supported the introduction of the exchange rate “floor” by the CNB and subsequently characterized it as “pathbreaking.”** During the run-up to the policy shift, Fund staff had already been discussing with the authorities the modalities of a strategy of foreign exchange (FX) intervention to ward off deflation. In the 2013 Article IV consultation, staff advised that regular, pre-announced, and fixed-size interventions would be the best way “as they would prevent the perception that the CNB has a target exchange rate in mind.” Even though the “floor” was not the style of intervention they had suggested, the Article IV report recommended keeping it in place “until deflation risks recede” after considerable internal debate (IMF, 2013g).¹¹ IMF working papers (Alichi and others, 2015; Clinton and others, 2017) carefully explained the Czech method, characterizing it as “pathbreaking” and a potential model for other countries.

59. **The focus in discussions in Sweden was squarely on the ongoing debate about the use of monetary policy to address financial stability concerns.** As with the U.K. case, IMF staff publicly supported the Riksbank’s policy actions all through this period, although there was some internal questioning, including whether to support the Riksbank’s decision to lean against the wind. Review departments were concerned about the impact of tightening on the economy and suggested greater reliance on macroprudential policies. However, these views did not carry the day and the Fund publicly invariably supported the majority position within the Riksbank. When the Riksbank changed course in 2014, so did the IMF, with the 2015 Article IV Report characterizing the new monetary policy stance as “appropriate” (IMF, 2015b).

¹⁰ The Swiss current account surplus has been running at about 10 percent of GDP since the mid-1990s, prompting allegations by Bergsten and Gagnon (2012) and Gagnon (2014) that Switzerland is a “currency manipulator,” using policy tools to weaken the CHF. Since 2016, Switzerland has been included in the monitoring list by the U.S. Treasury Department in its semi-annual review of currency practices. See also Taylor (2018).

¹¹ Though Fund staff were not involved in the decision to introduce the floor or the design of the details, the IMF’s modelling team had in the past contributed to building the CNB’s analytic capacity to implement inflation targeting.

60. **In Canada, the Fund’s focus was again on financial stability issues, with particular concern centering on the housing market.** Overall, the Fund consistently agreed with the Bank of Canada that macroprudential tightening was preferable to monetary policy tightening to manage financial stability risks and to avoid “leaning against the wind.” From 2010 onward, every staff appraisal in Article IV reports approved of the macroprudential measures taken by the authorities to cool housing markets, advising greater tightening of these measures if they did not have the intended effect. By 2016, the IMF judged that “macroprudential policy has been broadly effective in alleviating financial stability risks” (IMF, 2016c). However, there were differences in view with regard to application of the IV on capital flows as the Fund assessed that some measures taken in response to housing price pressures treated foreign investors differently than residents and should be classified as CFMs, and suggested alternative measures. Canadian authorities did not agree with the characterization of provincial nonresident property transfer taxes as they were narrowly targeted to address excessive demand for housing, including from foreign investors, in two urban areas and were not introduced to target capital flows. Their effect on aggregate capital flows was likely minimal, given Canada’s high degree of capital account openness.

C. Assessment

61. **Central bank officials in the smaller AEs generally found Article IV consultations stimulating and useful even though these consultations did not greatly influence their novel policy decisions.** Officials noted that, when they looked for external advice on monetary policy issues, they would typically first turn to counterparts at other central banks and to experts at the BIS with whom they had regular contact in committee and working group meetings. The value of the Article IV consultation came from the opportunity they provided to discuss monetary policy issues as part of the overall macroeconomic framework with well-informed external experts. Moreover, although Fund staff had not anticipated or recommended initiatives taken by some of these central banks, the Fund’s analysis and public support of these actions after they were taken was regarded as providing helpful validation.

- The Czech authorities in particular noted that a long association with Fund research staff on inflation targeting and related modeling issues prior to the GFC had a positive cumulative impact on their capacity for monetary policymaking. They were thus comfortable making the policy and operational decisions about the entry and exit from the exchange rate floor on their own. Nevertheless, they appreciated Fund support for their decisions and regarded discussions with the Fund on intervention strategies as useful even if in the end Fund advice had not been adopted.
- Likewise, though the Fund had not anticipated or recommended the exchange rate “floor” in Switzerland, the Fund’s support was valuable in countering some critiques both within and outside the Fund that the country was a “currency manipulator.” The Fund’s analysis of the specific factors contributing to the very large Swiss current account surplus was also helpful to the authorities.

- Danish officials followed a long internal process of discussing the feasibility of negative interest rates and consulted “selectively” with people at other institutions. They did not approach the Fund for advice but some conversations about negative interest rates took place on the margins of the regular Bank-Fund meetings. Officials sensed that the Fund might find it difficult to be very supportive of negative interest rates until enough evidence had accumulated on their effects.

62. **The Fund was not proactive in extending the policy toolkit for the smaller AEs.**

Arguably, intellectual curiosity and the global trend, already evident pre-crisis, towards lower neutral real interest rates should have prompted more exploratory work at the Fund on effective tools for small open economies for monetary stimulus close to the effective lower bound. As central banks in these economies experimented with new approaches, the Fund had little analytical material to bring to bear. It was also quite slow in publishing reviews of emerging experience with the new instruments. The Fund did provide a “positive view of negative interest rates” in 2016 (Viñals, Gray, and Eckhold, 2016) and reviewed the experience of countries in a Policy Paper presented to the Board in 2017 (IMF, 2017a)¹² but these papers were issued four years after the Danish action, and after it had already been emulated by several other central banks.

63. **The Fund tended to be quite deferential to the central bank’s majority view,**

sometimes leading to inconsistencies in advice across countries. For example, both Sweden and Canada had recovered quickly from the initial effects of the GFC and faced buoyant housing markets. Despite the emerging corporate view at the Fund in favor of not leaning against the wind, the Fund supported the majority view at the Riksbank to use monetary policy to cool housing markets, even as it staunchly supported the Bank of Canada’s decision not to use monetary policy for this purpose.

V. ADVICE TO EMERGING MARKET ECONOMIES¹³

A. Context

64. **The policy responses to capital flow volatility after the adoption of UMP differed significantly across EMs.** Among our case studies, Brazil, China, and India were active users of CFMs and intervened extensively in FX markets; Korea and the ASEAN countries relied heavily on MPPs together with intervention; Mexico and South Africa relied largely on exchange rate flexibility and avoided CFMs; and Turkey adopted a heterodox monetary policy framework. A few countries considered applying for the FCL to bolster international reserves and shield themselves

¹² For comparison, the World Bank’s *Global Economic Prospects* included a box on negative interest rates in June 2015 and a detailed study for the Board in July 2016.

¹³ This section draws on Mohan (2019), Darius and Loungani (2019), Borensztein (2019), Darius (2019) and Kalemli-Ozcan (2019).

further from liquidity shocks, but only Mexico (from the set of EM case studies included in this evaluation) ended up obtaining approval for the FCL.

65. **Brazil, China, and India employed a variety of measures to deal with the effects of capital flow volatility on exchange rates and domestic financial conditions.** These countries were also vocal in raising concerns about spillovers from UMP, particularly QE in the United States from 2010 on.

- Brazil reintroduced a tax on foreign financial investments in October 2009, which was increased and broadened in coverage as inflows remained strong following the Fed’s launch of QE2. It also used both spot and forward intervention to combat large real exchange rate swings and MPPs—including differential capital requirements and regulations on maturity and LTV ratios—to curb credit growth.
- When China experienced large capital inflows over 2009–13, the authorities were more accepting of “leakages,” while keeping formal restrictions on outflows and intervening to dampen RMB appreciation. After the “taper tantrum” and in the context of volatile market conditions in 2015, when concerns pivoted to capital outflows, China reinforced existing CFMs and imposed some additional measures—such as rules concerning cash withdrawal by Chinese citizens and a 20 percent unremunerated reserve requirement on forward FX sales—while using accumulated reserves to lean against FX market pressures.
- When capital inflows surged in 2009, India turned to FX intervention and selective CFMs to manage capital flow volatility. Once the situation stabilized, the central bank took a hands-off approach to intervention and liberalized restrictions on foreign portfolio investment. In 2013, however, after the “taper tantrum,” it again resorted to CFMs—including less orthodox steps like subsidized FX swaps to attract non-resident inflows—in addition to orthodox adjustment measures like monetary tightening and fiscal adjustment.

66. **A distinctive part of the policy response in Korea and the ASEAN5 over the 2010–13 period was the extensive use of MPPs alongside CFMs, building on experience in using such policies in the previous decade.** MPPs included caps on LTV ratios for real estate lending, which were actively used by several of these economies faced with overheating housing markets. CFMs included minimum holding periods for central bank bills and withholding taxes for nonresident investors. After the “taper tantrum” in 2013, many of these countries used MPPs to counter the threat of outflows. Since 2013, the challenge has again been mainly to deal with inflows, though volumes have generally receded and some countries have gone through periods of outflows in the context of spikes in global risk aversion.

67. **Mexico and South Africa relied on exchange rate adjustment with limited FX intervention.** The Mexican peso was largely freely floating at the start of the GFC, though the central bank implemented different mechanisms of FX intervention until early 2016. Outside of this rule (and another relating to auctioning of oil company revenues), Mexico did not intervene, though it built up

liquidity buffers through the FCL. In South Africa, appreciation of the rand in 2010 following a surge in inflows prompted opportunistic FX purchases to increase official reserves, but the intervention was less aggressive than in other EMs. By the time of the “taper tantrum,” capital flows had reversed and the authorities allowed the rand to depreciate.

68. **Turkey used a heterodox monetary policy framework from 2010 to mid-2018 to manage financial stability risks and maintain price stability.** The framework combined MPPs such as differentiated reserve requirement and a reserve options mechanism (giving banks the incentive to alter the currency composition of their reserves in line with changes in the costs of borrowing in foreign currency) with an asymmetric interest rate corridor. The Turkish approach was aimed at allowing monetary policy to be set in a way consistent with growth objectives while containing inflation and limiting FX market pressure. In mid-2018, the central bank returned to a more orthodox approach in the face of sustained market pressures.

B. IMF Advice

69. **Following the GFC, the IMF was increasingly open to the use of CFMs by countries in the face of volatile capital flows.** Even before the adoption of the IV, staff were sympathetic to the use of temporary CFMs in the face of the significant volatility in cross-border flows, more so than before the GFC.¹⁴ After the IV was approved, Fund staff were more systematic in discussing the role of CFMs, including in countries that preferred not to use such policy instruments.

- The Fund largely approved of Brazil’s proactive and heterodox actions, albeit expressing concerns that measures could eventually become ineffective or risky. At the same time, Fund staff cautioned against heavy use of intervention, pointing to potential losses by the central bank. When Brazil started to intervene heavily in forward markets, staff analysis concluded that intervention in derivative markets was indeed effective in affecting the spot rate.
- In India, when capital inflows surged in 2009, IMF staff stressed that rupee appreciation should be the first response to capital inflows, but in 2010 recognized that intervention and some CFMs also could be helpful, albeit as “last resort” tools. In 2013, when India took less orthodox steps in response to concerns about net outflows, the IMF did not object, although it did not provide a public statement of support for the measures taken until the 2014 Article IV by when the situation had already turned for the better (IMF, 2014a).

70. **The Fund supported the active use of MPPs by several Asian economies after the GFC, but recently has been less welcoming of some measures labelled as CFMs.** For instance, in 2012–13 staff supported the introduction of stricter prudential controls in Indonesia, Korea,

¹⁴ Prior to the GFC, the Fund generally encouraged capital account liberalization, albeit typically in a pragmatic, sequenced approach, and warned against CFMs as being distorting and only temporarily effective (IEO, 2015).

and Malaysia. They also noted that real estate prices had stabilized due to the authorities' effective MPPs. Staff also highlighted the success of LTV limits in the Philippines. However, the Fund was less supportive of some measures taken recently—such as measures to encourage the on-shore ringgit market in Malaysia and FX hedging requirements in Indonesia—which were labelled as CFMs.

71. **The IMF supported the decision by the Mexican and South African authorities to use flexible exchange rates as the main policy lever.** Staff agreed with the authorities that the role for CFMs was quite limited, in view of the commitment to already open capital markets. The Fund consistently supported the flexible exchange rate regime as an important shock absorber in dealing with capital flow volatility. The provision of the FCL to Mexico in 2009 and its subsequent multiple extensions reflected the IMF's confidence in Mexico's policy framework. In the case of South Africa, the Fund consistently urged the authorities to increase the level of international reserves, which were below the optimal level based on the IMF's reserve adequacy metrics and the levels held by peer EM economies. Staff suggested that reserve accumulation could be achieved through opportunistic FX purchases at times of large capital inflows and, as done by Mexico and Turkey, through preannounced small regular FX purchases that would not interfere with the floating exchange rate regime.

72. **For China, IMF advice was framed in the context of the country's longer-term strategic commitment to a more market-determined exchange rate, more open capital markets, and deeper domestic financial markets.** The Fund was quite intensively engaged in helping China's authorities advance towards these goals—particularly in the period leading up to inclusion of the RMB in the Special Drawing Right (SDR) basket in 2015—while also responding to the short-term pressures created by swings in capital flows. IMF contributions included specific advice on designing monetary policy approaches as domestic markets deepened, and on developing deeper and more sophisticated FX and money markets. Support was provided through numerous channels including the resident representative office, technical assistance, and the convening of an annual research seminar together with the People's Bank of China (PBoC), as well as the regular Article IV consultations.

73. **The IMF initially provided cautious support for Turkey's heterodox framework but became more critical when inflation and current account outcomes proved to be unsatisfactory.** Staff initially characterized the heterodox framework as "innovative" and noted that it has been taken in the face of "unprecedented monetary easing in advanced economies." Subsequently, with continued pressures on inflation, rapid credit growth, and a large current account deficit, Fund staff started to modulate their position and urged in 2012 that "these new measures should be continuously reassessed in light of experience" and that "a return to a more conventional framework would be required should the inflation target remain elusive or inflation expectations stay high." Over time, staff became more forceful in advocating a change in policies, noting that the inflation target of 5 percent had not been met and urging a more conventional approach to manage inflation expectations.

C. Assessment

74. **Article IV consultations are generally regarded by officials as a useful source of advice on monetary policy and dealing with capital flows.** Authorities in all EM countries studied here valued the Article IV consultations as a regular and thorough discussion of their choices across a wide spectrum of policies with a trusted partner. There were virtually no instances where authorities felt they had received wrong advice from the Fund on a major issue over the past decade.

75. **That said, IMF advice could be enriched by greater depth in discussions of monetary policy issues and greater focus on relevant cross-country experience.**

76. **First, the Fund provided most value to central banks when its advice was based on deep expertise.** Examples where the Fund had been particularly helpful were the technical assistance provided to India on macro-modeling prior to the introduction of inflation targeting and the extensive technical support for China's financial and exchange market reforms. More generally, however, there was a sense that the Fund staff has been more comfortable with high-level conversations than with operational guidance or in-depth discussions on specific issues. In both Brazil and Mexico, for instance, the view expressed was that staff advice, although sound on general economic grounds, did not bring much insight into market dynamics or offer practical guidance on the implementation of FX intervention. Similarly, in India, it was felt that Fund advice on monetary issues was somewhat "formulaic" rather than helpful in advising on, say, CFMs that would work at a particular moment. In the case of Turkey, officials felt that they could have received more technical advice from the Fund in developing their heterodox policy framework. As with the smaller AE central banks, many senior officials said that they relied more on counterparts in other central banks (particularly in regional networks) or at the BIS, which was seen as being more pragmatic and having greater depth of monetary expertise.

77. **Second, the authorities would appreciate greater discussion of global developments and of cross-country experience relevant to their policy choices.** The joint IMF-PBoC annual conferences were seen as an effective avenue through which such discussions were facilitated in the case of China and were regarded as a good use of the IMF's convening power to share cross-country experiences. An initiative by the South Africa mission chief to organize meetings of EM officials and IMF mission chiefs on the margins of the Bank-Fund meetings was also mentioned as an example of good practice.

78. **The development of the IV on Capital Flows was welcomed by most officials as a sign of the Fund's willingness to depart from "orthodoxy."** Officials were generally pleased with the Fund's willingness to be more open to the use of CFMs. Although the shift had materialized only after many of the countries had introduced such policies, officials were pleased that the Fund had shown support for some of the measures they had been using. The work on MPPs, both conceptual and the compilation of cross-country experience, was particularly appreciated.

79. **However, the application of the IV has not turned out to virtually any country's full satisfaction.** At one end of the spectrum of views, Mexican officials were concerned that the IV could be read as an "open blessing" to CFMs, even though the formulation of the IV is careful about accompanying policies and circumstances that warrant the use of capital controls. At the other end, ASEAN officials felt that the restrictions placed on the use of CFMs were so limiting that it did not really expand the choice set of policies that could be used by countries with the Fund's blessing. They would prefer an approach that recognized that CFMs could play a role pre-emptively as part of a broad toolkit of measures, not just as last in a hierarchy of policies (ASEAN, 2018). There was also a concern expressed quite broadly, echoing officials in the smaller AEs, that the IV was applied too rigidly by the Fund, with insufficient flexibility to respond to country circumstances. There was also a concern expressed by Indian officials that the IMF was still too cautious in publicly endorsing innovative measures that deviated from orthodoxy.

VI. FOSTERING INTERNATIONAL MONETARY COOPERATION¹⁵

80. **Since the GFC, the IMF has been active through multiple channels to foster international monetary cooperation, including to address the concerns of EM officials that UMP in AEs were creating difficult challenges for their economies.** As described earlier, many EM policymakers were concerned about potentially adverse spillovers on their economies, especially as UMP remained in place for a prolonged period. While initially accepted as necessary for the recovery of AEs and good for global growth by fostering increased trade, over time UMP were seen as increasingly challenging EMs, by prompting large and volatile capital flows that could damage competitiveness, fuel excess leverage, and threaten asset market overheating. Concerns continued, even amplified, as AEs (notably the U.S.) pivoted towards monetary tightening, leading to periods of risk aversion and stress for EMs. The IMF responded through: (i) broader efforts to strengthen international policy cooperation, including by adopting the ISD and working with the G-20; (ii) intensified analysis of cross-border spillovers, embodied in the launch of Spillover Reports; (iii) the development of the IV for guiding advice on capital flows; and (iv) reinforcing the global financial safety net, notably through the establishment of the FCL.

A. The IMF's Role in International Policy Cooperation

81. **The Fund's role since 2008 in attempting to foster international policy cooperation has some similarities with earlier periods of crisis and reform.** Almost from the beginning of its existence, the Fund has made commendable efforts but nonetheless struggled to fulfill its mandate in the Articles of Agreement to promote international monetary cooperation. Since the 1940s, the MAE governments have zealously guarded sovereignty over their exchange rate and monetary policies, and key decisions regarding the international monetary system were usually taken in small settings (e.g., G-5/G-7) with a limited Fund role. The initiative to establish the SDR in response to the "dollar problem" in the 1960s did not prosper, while the collapse of the Bretton Woods system of fixed exchange rates in the 1970s eroded the IMF's formal jurisdiction

¹⁵ This section draws on Schenk (2019) and Klein (2019).

over exchange rates, leading to an approach to bilateral surveillance largely based on advice and peer pressure with limited statutory sanctions for national policy choices potentially disruptive to stable global conditions. Nevertheless, the Fund's lending facilities, technical expertise in crisis management, and ability to be a forum for regular discussion among senior officials have meant that the Fund invariably plays an important role, particularly in providing financing in times of balance of payments stress. This was certainly the case after the GFC as the Fund deployed its traditional facilities to provide crisis financing to both AE and EM members, introduced new precautionary facilities, and mobilized a rapid augmentation of its financial resources (IMF, 2016b; 2016d).

82. Since the GFC, the IMF has worked intensively with the G-20 on initiatives to strengthen international cooperation on countries' broad economic policy agendas, with mixed success. With the addition of the "leaders track" in 2008, the G-20 emerged as the leading global body for international policy cooperation. The G-20 has no permanent secretariat and relies on support from the IMF and other international organizations. The IMF contributed significantly to successful efforts to mobilize an initial coordinated fiscal stimulus alongside UMP in response to the GFC. As recovery appeared to take hold, the G-20 asked for IMF analysis of the principles that should govern the exit from UMP (G-20, 2009). One of the principles included a call for coordination to prevent adverse spillovers. When the G-20 set up the Mutual Assessment Process (MAP) in 2009 to encourage countries to adopt monetary, fiscal and structural policies that would boost their own as well as global growth, the IMF provided the technical analysis to assess the policy plans put forward by members. At its launch, the MAP was heralded as an important improvement in international policy cooperation, with the IMF's Chief Economist, Olivier Blanchard, known to be a skeptic of previous such efforts, writing that "a problem shared is a problem halved." Since then, although the IMF has continued to prepare detailed diagnostics and policy recommendations for further actions, the MAP has had limited traction in nudging countries toward the broader mix of monetary, fiscal, and structural policies needed to achieve strong, sustainable, and balanced growth.

83. The Fund has also overhauled its own surveillance framework to strengthen attention to spillovers, most notably through the adoption of the ISD in 2012 (IMF, 2012a). The ISD requires the Fund, in fulfilling its multilateral surveillance mandate, to assess the spillovers from a country's policies—including domestic policies—during the bilateral Article IV consultations if these spillovers could significantly affect the operation of the international monetary system. The hope was that recognition of spillovers arising from domestic policies would encourage countries to consider alternatives, although, as in the past, there was no obligation for them to change policies. In addition, the IMF's technical approach to external assessment was overhauled, and the Fund's views on global imbalances were given greater profile in an external sector report (see IEO, 2017; IMF, 2018c).

84. These new approaches have generally been regarded as technically well-founded but have not succeeded in making multilateral concerns an effective influence on

members' policy decisions. The legacy of the Bretton Woods emphasis on the exchange rate system as the core of international monetary cooperation and the Fund's limited mandate over capital as opposed to current account transactions constrain the scope and traction of the Fund's surveillance and monitoring in an environment of floating or more flexible exchange rates and increasingly open capital markets. The ISD has allowed external stability consequences of domestic policies including UMP to be discussed but its application has not been very effective in internalizing these issues in "source" country policy decisions.¹⁶ Similarly, the external balance assessment has been a valuable lens to assess current account and exchange rates but has not proven an effective tool to pressure countries' policy choices (IEO, 2017).

B. Spillover Analysis

85. **Spillover Reports (published from 2011 through 2015) represented an early effort to examine the impact of UMP, as well as other policies and developments, on other countries.** The reports used an eclectic mix of approaches in the absence of any established model in the academic literature. The core of the reports was the use of macroeconomic models, including DSGE models and VAR analysis, which were broadly consistent with work by others looking at this issue in academia and central banks, except in the case of estimates from a new Global Financial Model. Interviews with experts indicate that the IMF models were considered as useful particularly in the early years but did not develop innovative research methodologies. Since 2016, spillover analysis at the Fund has been incorporated in the *WEO*, which includes a chapter a year on some aspects of spillovers. So far, the analysis has mostly been of real-side (trade; migration; productivity) rather than financial spillovers.

86. **The Spillover Reports had only limited success in assessing the financial channels for adverse spillovers that caused major concern for EM policymakers.** The most harmful effects of spillovers may well be through financial channels rather than through the trade account, and the modeling of such spillover channels is still not fully developed. As discussed in Klein (2019), while the Fund was an early mover in attempting to incorporate financial spillovers in Dynamic Stochastic General Equilibrium models, the Spillover Reports did not in the end succeed in the admittedly difficult task of making breakthroughs in ways that would have been useful for policymakers. Financial channels are difficult to embed in a large-scale macroeconomic model and, when they have been included in the Fund's spillover modeling, have often appeared as factors like exogenous shifts in the term premium or risk factors, which are too vague a means to truly understand these effects and do not yield clear policy prescriptions. There has been some recent progress in the modeling of financial spillover channels but mainly in research by central banks and academics (see, for example, the papers presented at the IMF's 2018 Annual Research Conference).

87. **Officials appreciated the Spillover Reports as signaling the Fund's desire and efforts to help EMs but questioned their practical impact.** The Spillover Reports were generally

¹⁶ See IMF (2016a) for an overview of the application of the ISD framework to UMP.

welcomed by authorities as a useful attempt by the Fund to understand the spillovers from UMP and other policies and developments. Some considered them a useful tool to motivate the discussion of cross-border effects in international forums such as the G-20. Nevertheless, the reports gained little traction with the authorities in the countries carrying out UMP. Hence, many shared the view of an official in Brazil that the reports were “interesting but not very relevant for policy-making.” Chinese authorities also felt that Spillover Reports had not fully captured the effects of UMP for China; UMP in their view “not only fueled inflation pressures but also constrained the options regarding policy mix, as well as the timing, path, and pace of the monetary policy normalization in emerging market economies.” In India as well, senior officials felt that the Spillover Reports were not in the end very useful because they did not adequately capture the impact through financial channels. Moreover, it seemed that the ultimate policy message was always going to be “grin and bear it” when it came to any effects on EMs from AEs. Under this view, the IMF needed to press harder in its policy advice to the source countries if it wanted to be of help to EMs.

C. The Institutional View and Advice on Capital Flows

88. **IMF staff have worked intensely to develop an approach for coherent policy advice on dealing with volatile capital flows.** While EM policymakers took the lead in innovating in this area, IMF staff followed quickly with detailed review of country experience as well as conceptual work to develop an IV on capital flows to guide IMF policy advice, approved by the Board in 2012. The IV is intended to provide a template for the IMF to give coherent and consistent advice to countries differing across a range of relevant dimensions such as macroeconomic frameworks, exchange rate regimes, regulatory frameworks and institutional structures, including on the role and use of CFMs. While the IV was a compromise after considerable discussion, senior officials confirmed that the IV has succeeded in becoming the central framework for policy discussions on responding to capital flows between the Fund and the members. Experience with the IV was reviewed in 2016, and the Fund has done further work to clarify the relative role of CFMs and macroprudential policies (IMF, 2017b). Staff has also engaged with authorities to promote better understanding of the country application of the IV, for instance through workshops with government officials at recent Bank-Fund Spring and Annual meetings and the compilation of a taxonomy of CFMs (G-20, 2018).

89. **While policymakers see the IV as an important step forward in framing advice on capital flows, they also have raised three areas of concern.**

90. **First, the effectiveness of CFMs is still subject to considerable debate and remains an open area of research.** Some experts find that episodic capital controls on a limited range of assets could be leaky and ineffectual, especially as these controls stay in place and people find ways to circumvent them (Klein, 2012). Others argue that all policies can be circumvented to some extent, so the relevant question is whether CFMs can be circumvented more easily than other measures that would be adopted instead such as MPPs (Ostry, Ghosh, and Korinek, 2012). EM policymakers themselves have quite varying assessments of the impact and value of the

CFMs that they have introduced in recent years. Thus, there is a need for continuing assessment of experiences and willingness to adapt in the light of the findings.

91. **Second, some advanced and EM officials have raised concerns that the IV is applied too rigidly.** Considerable efforts have been made by Fund staff to apply the IV in an evenhanded way across countries. Nevertheless, officials sometimes feel that the results do not adequately reflect differences in circumstances. As noted above, an issue regarded as irksome by some country officials was the Fund's labeling as CFM steps that countries view as having been taken for financial stability reasons or to ensure affordable housing, undoing some of the goodwill generated by the perception that the IMF was becoming less doctrinaire.

92. **Third, though CFMs have been used actively over the past decade, some countries have expressed dissatisfaction that the IV does not adequately expand their policy choice set.** As noted above, one issue relates to whether CFM should be regarded as a part of a broader toolkit which could be used pre-emptively and kept in place, or whether, as currently presented in the IV, CFM would be used only after appropriate macroeconomic adjustment and then only on a temporary basis.

D. Reinforcing the Global Financial Safety Net

93. **The IMF's track record with precautionary lines of credit before the GFC had not been promising.** Over the years, the IMF has experimented with a range of liquidity facilities, particularly schemes with ex ante qualification and no ex post conditionality. A Short-Term Financing Facility was considered in 1994 but not in the end adopted because the Board was concerned about the lack of conditionality, the challenge in defining eligibility and overlap with other facilities. The Contingent Credit Line, introduced in 1999, was another attempt at developing a pre-qualification borrowing facility after the EM financial crises in 1998 showed that contagion effects could hit otherwise sound economies. But it was allowed to lapse in 2003 given the lack of use (IMF, 2003).

94. **In 2009, however, the Fund successfully introduced the FCL.** The FCL provides a precautionary line of credit to countries with very strong economic fundamentals and institutional frameworks and a sustained track record of implementing very strong policies. The expectation was that the lack of ex post conditionality and the seal of approval for the member's economic policies ex ante would make this an attractive facility for a range of countries. To date, only three countries—Colombia, Mexico, and Poland—have obtained approval for an FCL. Mexico's praise for the FCL was noted earlier. Polish officials and Colombian officials also found that the FCL has helped to reinforce market confidence (IMF, 2017c; 2018a). In addition, in 2011, the Precautionary and Liquidity Line (PLL) was introduced, for countries with sound economic fundamentals but with some limited remaining vulnerabilities which preclude them from using the FCL. Only two countries (the Former Yugoslav Republic of Macedonia and Morocco) have used this instrument so far.

95. **Limited pickup of the FCL and PLL by other countries that could qualify for these instruments seems to reflect concerns on a number of fronts.** In explaining why they had not pursued this option, officials pointed to the potentially adverse impact from losing qualification for access, uncertainty over continued availability when most needed, and lingering stigma of IMF borrowing even without ex post conditionality. The Fund has continued to explore various options for liquidity instruments that could attract wider use, but to date has not been able to find designs that can receive broad support among the membership and attract interest from potential users (IMF, 2017d).

VII. FRONTIER CENTRAL BANKING ISSUES¹⁷

96. **The IMF has played a role in the renewed debate on a host of central banking issues over the past decade, notably by periodically putting together useful surveys and “think pieces” and organizing forums helpful for highlighting the shifting debate.** Important contributions from the Fund include a policy paper assessing the experience with UMP (IMF, 2013b; 2013h), a survey paper (Dell’Ariccia, Rabanal, and Sandri, 2018), SDNs by Blanchard, Dell’Ariccia, and Mauro (2010) and Bayoumi and others (2014), and a book *Advancing the Frontiers of Monetary Policy* by Adrian, Laxton, and Obstfeld (2018). The Rethinking Macroeconomics conferences, along with the Annual Research Conference and the Camdessus Central Banking Lecture have also been useful venues for the Fund to listen to the views of experts and make its own views known.

97. **The IMF has developed views on the main issues as follows:**

- *Monetary policy toolkit:* Should UMP become part of the conventional toolkit of central banks to support economies during future slowdowns and recessions? The Fund’s 2013 policy paper assessed UMP to be generally effective, though it noted that the effectiveness may have diminished over time. The paper did not address issues of whether and how UMP should be used in the future.
- *Monetary policy framework:* Should the inflation target be raised, possibly keeping the economy away from the effective lower bound and diminishing the need for UMP? Would price level path targeting or nominal GDP targeting provide a more powerful framework for monetary policy than conventional inflation targeting? The IMF has weighed the pros and cons and appears largely to favor the status quo, namely a flexible inflation targeting framework. While recognizing that “other intermediate objectives such as financial and external stability may have to play a greater role than in the past,” the IMF staff has been of the opinion that “in many ways, the monetary policy framework should stay the same” (Bayoumi and others, 2014; Adrian, Laxton, and Obstfeld, 2018).

¹⁷ This section draws on Everaert and others (2019).

- *Governance of central banks*: Some observers feel that central banks undertook operations that crossed into quasi-fiscal territory and were not fully transparent with the public about the risks involved (Tucker, 2018). Should steps be taken to strengthen accountability of central banks and to subject them to greater political oversight? The IMF has expressed its support for central bank independence but not weighed in very extensively on the debate of accountability and oversight of central banks.
- *Central bank digital currency (CBDC)*: Could CBDC alleviate the constraints placed by the effective lower bound and limits to the effectiveness of UMP? This is a fast-moving issue on which Fund management has been portrayed in the media as encouraging central banks to explore the adoption of CBDC and thus has appeared more forward-leaning than the staff's guarded 2018 Policy Paper on the pros and cons (IMF, 2018b).

98. **Overall, the Fund has not been at the forefront of new thinking on these issues.** Interviews with staff and outside observers suggest that, while the IMF has contributed to the discussions and played a helpful convening and dissemination role, the Fund lacks a core group of top monetary policy experts such as found at major central banks or the BIS to spearhead ground-breaking work. While the Fund would not be expected to have comparable in-depth expertise as a MAE central bank, outside observers commented that the IMF should be well placed to use its cross-country experience and attention to cross-border issues to help develop best practices and disseminate findings to the membership. It can also provide a counterweight to the risks of group think among central bankers, bringing a broader governance perspective. Developing a stronger reputation and capacity as thought leader would also enrich the value added and influence of IMF advice in individual country cases.

VIII. INSTITUTIONAL ISSUES

99. **The Fund's advice on UMP in the MAEs was based on a robust internal debate that helped to ensure consistency while allowing tailoring to country circumstances.** While area departments are in the lead for developing IMF policy positions for Article IV consultations, the advice is always subject to careful inter-departmental review and, particularly for the MAE, quite intense interaction with senior staff and management. IMF staff also debated the effectiveness of UMP at weekly surveillance committee meetings, with participants raising cost as well as benefits. In the early stages of UMP, where there was little experience to learn from, the Fund reached consensus not to express internal doubts but to advocate exit from these policies as soon as feasible and to stress that other policy steps, such as support for the housing sector, were also needed to promote recovery. Over time, as the initial stress receded, there were greater internal concerns about the effectiveness of the later rounds of QE than about the early ones.

100. **The Fund did not develop a structured process for the formulation of advice on UMP more generally.** Having moved quickly to place the Fund's weight behind these experimental policies, the Fund did not, however, put in place an active and continuous process to assess the impact of these programs on growth and inflation, to judge the merits of new

programs as they were announced, to debate whether a different policy mix would be more effective, and to share cross-country experience.

101. **The lack of a structured process for assessing UMP partly reflected the absence of a core team dedicated to monetary policy analysis and interacting regularly with central bankers in the thick of implementation.** Interviews with senior staff reveal that the Fund had recognized around 2012 the need to bolster its monetary policy expertise but did not succeed in its hiring efforts. Sporadic attempts, such as the setting up of a cross-departmental group in 2014, were helpful but did not provide the heft or continuous deployment of resources needed.

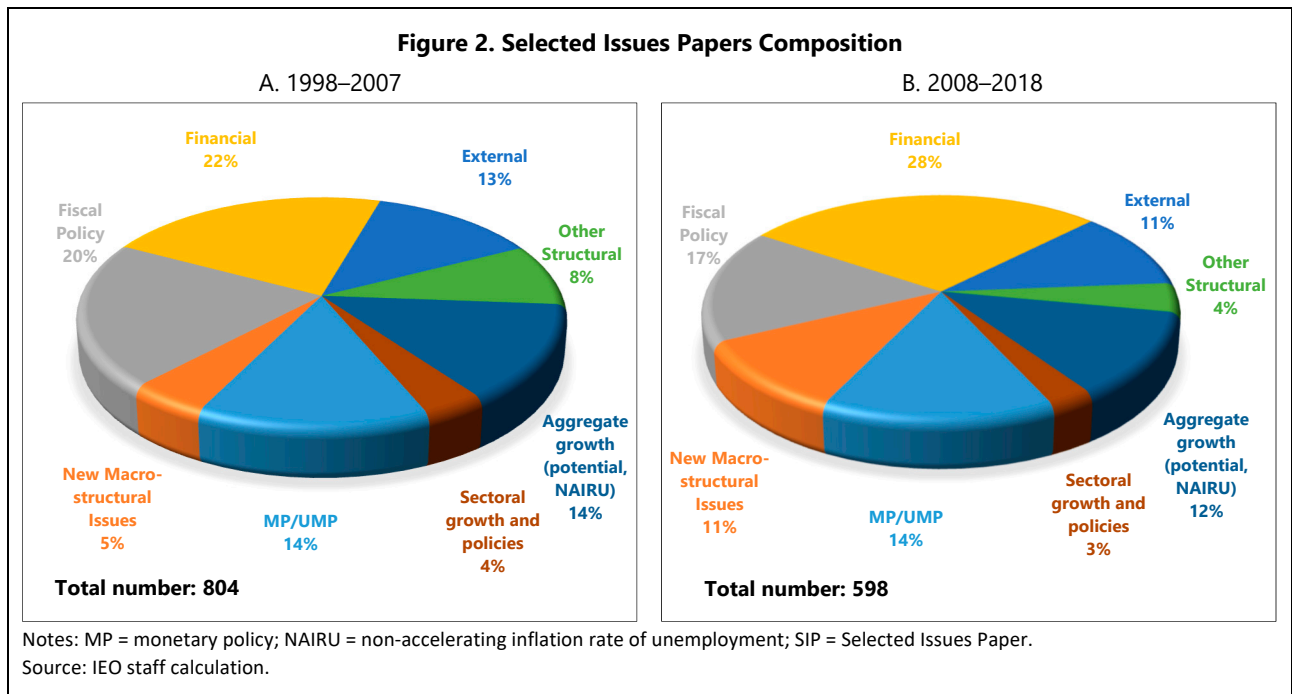
102. **More broadly, IMF staff resources specifically devoted monetary policy issues over the past decade have been quite limited.** Monetary policy has always been recognized as integral to Fund surveillance. Nevertheless, it has competed with other priorities such as strengthening financial surveillance and greater attention to macro-structural areas. Thus, even as monetary policy issues gained prominence on the global policy agenda with central banks needing to innovate under challenging circumstances, the Fund did not devote additional resources to them.

103. **Among functional departments, MCM is in the lead with two divisions devoted to monetary policy and operations.** However, one of those divisions—Central Banking Operations—is dedicated to providing technical assistance to central banks in smaller EM and low-income countries. The work described in this report falls under the domain of the other division—Monetary and Macprudential Policies. Over much of this decade, this division has had, in addition to financial sector experts, about a dozen fungible macroeconomists, constituting about 5 percent of MCM staff of fungible macroeconomists. This team has been mainly taken up with the Fund’s leading work on macroprudential issues and the interactions between monetary policy and financial stability. In addition to MCM staff, the macrofinancial division in RES also analyzes monetary policy issues but is mainly focused on interaction between macroeconomic factors and financial stability. RES also houses a well-regarded modeling division, whose large-scale models are used throughout the Fund for scenario analysis of the likely effects of policy actions, including monetary policies, and has done useful technical assistance work (e.g., for the Czech Republic and India as mentioned above). Adding in RES’s contributions, the Fund, as a rough estimate, has had 15 economists for whom monetary policy issues have been a substantial and regular part of their operational responsibilities—this is less than 3 percent of the Fund’s stock of fungible macroeconomists in functional departments.¹⁸

104. **For the area departments, monetary policy has competed for attention with other areas of focus over the past decade.** The “monetary” sector is one of the sectors of the economy assigned to a member on the country team, usually a fungible macroeconomist and

¹⁸ This figure does not reflect large teams assigned for a time on several of the other initiatives described in this report, such as the Spillover Reports and the IV on capital flows.

not a monetary policy expert. Monetary policy issues are routinely assessed in Article IV reports, and benefit from MCM comments during the review process. On occasion, monetary policy issues are analyzed in greater detail in Selected Issues Papers (SIPs). Over the past decade, in the countries covered in this evaluation, about 14 percent of these papers have been on monetary policy, the same as in the previous decade despite the increased prominence of such issues. Almost as much priority was given to new macro-structural work, particularly on jobs and growth (Figure 2), while attention to financial issues rose substantially.



105. **The Fund does not have a prominent presence in the field of monetary economics.**

The Fund has a number of economists who are among the profession's top economists as measured by citations to their work and other measures of influence. As many as 45 "Fund economists"—defined to include both current staff plus some who spent a substantial part of the past decade at the Fund—make it to a commonly used "Top 5 percent" list. However, of these only a couple could be considered monetary policy experts.¹⁹ Over the past decade, the Fund has conducted some very influential and highly-cited research. However, in the field of monetary economics, only one paper has garnered sufficient citations to place it among the top papers in the field, the article by then chief economist Olivier Blanchard on "Rethinking Macroeconomic Policy" which discussed the idea of raising the inflation target to 4 percent. Prominent surveys of the literature on UMP do not contain many references to IMF work. For example, Kuttner (2018),

¹⁹ A handful of economists in this list are not monetary policy specialists but took on substantial responsibility for the Fund's work on these issues over the past decade. In interviews, these staff noted that they stepped in to fill the void, but that the Fund would have been better served by having some more monetary policy specialists in senior positions. Some from this group have since left for positions at the BoE, ECB, and the World Bank, further depleting the Fund's knowledge base in this topic.

a prominent survey of the U.S. experience with UMP, has one reference to IMF work out of a total of 54. Dell'Arriccia, Rabanal, and Sandri (2018), a similar survey for other MAEs, has three references to IMF work out of 55. Though the IMF tends to rank high among institutions in rankings of research output, this is a function of the larger number of authors at the Fund than at other institutions. While each of these statistics has its limitations, the picture they paint of the Fund not being a powerhouse on monetary policy issues is confirmed by interviews with monetary policy experts and central bank officials (see Annex 1 of Everaert and others (2019) for further discussion).

106. **In bilateral surveillance, frequent turnover of mission chiefs and country teams has been a long-standing concern.** In the countries covered in case studies in this evaluation, the tenure of a mission chief ranges from under a year to five years, with an average of only about two years. Japan and Korea had as many as 7 different mission chiefs during 10 Article IV consultations between 2008–17 while the U.K. and the euro area had three (Figure 3). Turning to country teams, very few staff go to multiple missions to the same country: for the countries in our sample, nearly 60 percent of staff participated in only one mission to a country before being rotated to a different assignment, only 25 percent went on two missions, and only 10 percent went on three missions. The problems that arise from frequent rotations together with limited compliance with handover guidelines have been noted in previous IEO evaluations and intended progress in addressing these issues has been very limited.²⁰

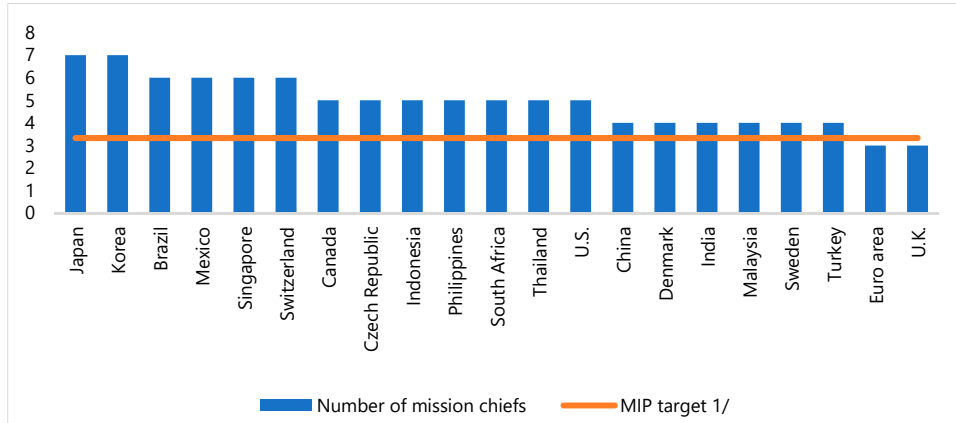
107. **Frequent turnover hampers development of deep understanding of country circumstances and building relationships relevant to bringing value added and influence to Fund advice on monetary policy issues.** As noted in several of the country studies, officials have reported that the short tenure sometimes comes in the way of an in-depth discussion of issues because time is spent in bringing the new mission chief and staff up to speed on country specifics. It also comes in the way of the IMF developing a trusted advisor role, which is essential for central banks officials to feel comfortable with discussing confidential and potentially market-sensitive monetary policy actions and intentions.

108. **The consequence of frequent turnover and lack of deep expertise is that the Fund is not viewed by member countries as the first port of call for expertise or advice on monetary policy issues.** Many officials told the evaluation team that when seeking external advice they typically preferred to use their networks at the BIS or at other central banks. In this respect, the BIS has the advantage of hosting a series of regular high-level meetings at the governor, deputy governor, and senior official levels. The BIS builds on this advantage by placing greater weight on staff who specialize in monetary policy issues and are more able to brainstorm on pragmatic second-best approaches without being tied to an institutional position.

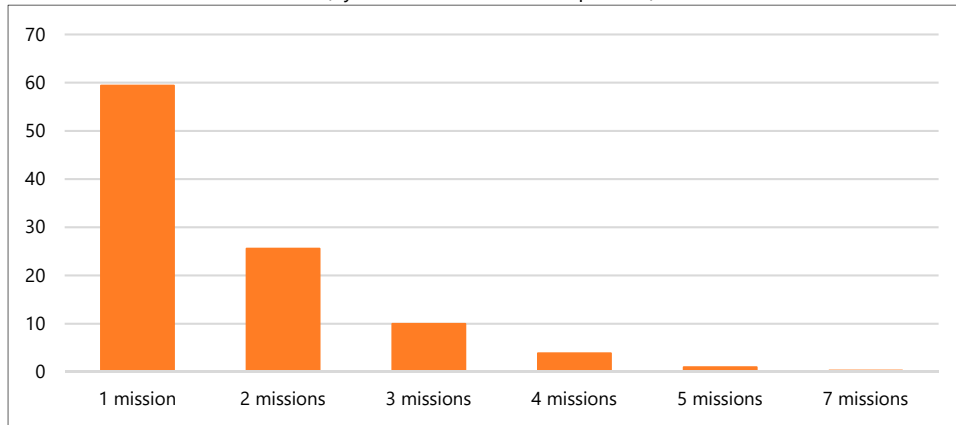
²⁰ The Ninth Periodic Monitoring Report noted that “no visible improvements have been made in the tenure of country assignments over the last few years” (IMF, 2018d).

Figure 3. Staff Turnover, 2008–17

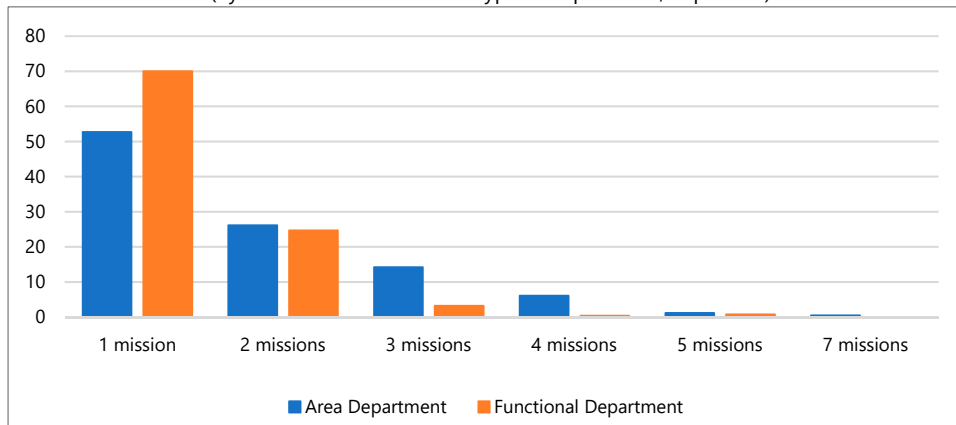
A. Number of Mission Chiefs



B. Participation of Staff in Article IV Missions
(By number of missions, in percent)



C. Participation of Staff in Article IV Missions
(By number of missions and type of department, in percent)



Note: Data apply to the 20 countries and the euro area covered in case studies in this evaluation.
 Source: IEO staff calculation based on Human Resources Department data and Article IV consultations.
 1/ Management Implementation Plan (MIP)—Role of the IMF as Trusted Advisor (IMF, 2013d).

IX. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

109. **The IMF's performance on UMP since the GFC has been wide-ranging and in many respects impressive.** It provided early support and validation to the countries leading the way, and made the case for aggressive use in other jurisdictions moving more slowly. It monitored implications for financial stability and helped to develop a new macroprudential policy toolkit. It brought attention to and analyzed spillover effects, and reconsidered advice to countries being affected by these spillovers in a new framework for advice on responding to capital flows. It strengthened its multilateral surveillance, contributed to the G-20 to encourage greater international policy understanding and cooperation, and introduced new precautionary financing instruments.

110. **That said, this evaluation also identifies shortcomings in the IMF's engagement on UMP that reflect longer standing and deep-rooted challenges for the Fund.** A number of factors have limited the value added and influence of the IMF's bilateral advice on monetary policy when it was most needed—for the major central banks and for others too. The Fund does not have deep expertise on monetary policy issues, while country teams often rotate quite quickly and its country engagement is usually too discontinuous, hindering the building of relationships and country knowledge. Efforts at systematic cross-country learning were limited and failed to take full advantage of the IMF's perspective across the full policy framework, noteworthy in the limited attention to analyzing costs and benefits of alternative fiscal-monetary mixes once the immediate crisis had passed. Some members still feel that the Fund has not gone sufficiently far to appreciate and respond to the policy challenges they face from cross-border spillovers and volatile capital flows. There have also been long-standing limits on the IMF's ability to encourage international policy cooperation and challenges to designing precautionary instruments that attract broad interest across the membership.

Advanced economies

111. **The IMF played a valued advocacy role on UMP in the MAEs through its bilateral and multilateral surveillance.** The IMF quickly developed a corporate view on UMP and adapted it over the course of the decade as the post-GFC recovery evolved, making good use of the reach and influence of its multilateral flagship publications as well as its bilateral surveillance engagement. Senior officials in the AEs that adopted these policies generally appreciated the Fund's support and found the Article IV consultations to be a useful validation of the steps taken. In the case of the euro area in particular, consultations with the IMF seem to have helped in building the case for QE, so that the ECB was better equipped to act when a consensus was reached. With Japan, the Fund was out front pushing the BoJ to take more aggressive action, although a change in political leadership was required before action was taken. U.S. and U.K. central banks acted quickly with the Fund playing little immediate role, but the Fund was helpful in validating difficult decisions.

112. **For smaller AEs, the Fund’s engagement on monetary policy issues was quite variable.** Among our case studies, it was more intense with Czech Republic and Switzerland, much less so with Denmark. The Fund had not thought ahead about the challenges that these smaller open economies would face as their policy interest rates approached the zero lower bound, and consultation was limited as their central banks opted to experiment with negative interest rates and exchange rate floors.

113. **IMF staff deserve particular credit for their work in developing the macroprudential policy toolkit to monitor financial stability risks, including those arising from UMP.** Over the course of the decade, the Fund generally advised against leaning against the wind in favor of the use of MPPs, although it deviated from this advice in the case of Sweden in 2010–13. In retrospect, this overall approach seems to have been well founded as a basis for policy advice in the post-GFC period. The Fund paid considerable attention to financial stability risks, from UMP and other sources, monitoring the key risks that had been identified as likely to occur from a decade of low interest rates. The Fund did a significant amount of work on providing a framework for the conduct of MPPs, assembling new databases of MPPs taken by countries, and spearheading work on effectiveness of these measures. This work provided high value added and had considerable traction.

114. **While recognizing these achievements, the Fund’s work on UMP in the AEs suffered from limitations.** Four deserve emphasis.

- First, the Fund does not appear to have been seen as a source of cutting-edge monetary expertise and ideas or as a first port of call for outside advice. Even though this was a time when central banks were often scrambling for advice as they were contemplating innovative policies such as negative interest rates, they generally did not consider approaching the Fund, nor was the Fund consistently ahead-of-the-curve in being prepared with policy advice that would be useful for these countries. This was true not just for the major central banks with their large well-trained staffs, but also for smaller central banks with more limited resources, which tended to look for external advice from central banking networks and BIS staff. The Article IV process was described as useful ex post validation of actions taken and general advice on the future course of policies rather than an opportunity to obtain specific operational guidance on monetary policy issues. To be sure, experience varied across countries, with the Fund having more influence where the relationship was deeper and more continuous, as with the ECB.
- Second, the Fund tended to give considerable deference to monetary policy actions by AEs, albeit with some notable exceptions. For example, the 2011 rate hikes by the ECB, which came in for criticism both at the time and later, were not questioned by Fund staff. The Fund also accepted arguments by central banks on what the effective lower bound on policy interest rates was for their countries even though these central banks later cut rates below those levels. The Fund supported the Riksbank when it was “leaning against the wind” and Canada when it decided against leaning.

- Third, the Fund could have been more energetic in subjecting its advocacy of UMP to strenuous “intellectual stress tests” and ex post empirical assessment, building on its comparative advantage in cross-country engagement. There was a robust internal review process which helped ensure consistent advice across the major economies where senior IMF staff were most heavily engaged, but the Fund was slow to systematically assess experience and share lessons, for example, after the introduction of negative interest rates. The failure of output and inflation to recover as quickly as forecast did not lead to a systematic attempt to understand whether UMP was working as advertised.
- Fourth, the Fund could have been more active, particularly early on, in thinking through policy interactions in a broader macroeconomic framework. At least in hindsight, the Fund was not forceful enough in 2010–12 in making the case that at least for some countries the shift to fiscal consolidation should have been gentler so as to put less burden on monetary policy to take extraordinary steps to support activity even as its ammunition was running out. Such an approach would also have generated fewer financial spillovers on other economies, which proved to be a major challenge for them to handle. Subsequently, the Fund has put much more emphasis on “growth friendly” approaches to fiscal consolidation.

Emerging economies

115. **The Fund launched a number of initiatives to respond to the concerns of EM member countries.** The IMF mounted an extensive response to the growing concerns of EM officials, as sustained UMP were associated with volatile capital flows, through a range of empirical and policy analyses, notably the Spillover Reports and the development of the IV on capital flows. The Spillover Reports were a commendable early effort to evaluate cross-border effects of policies using an eclectic range of tools in the absence of an established model in the literature to encompass the complicated financial channels through which such effects could occur. In the work on policies to respond to volatile capital flows that was embodied in the IV, the Fund was able to follow quite quickly the lead of EM policymakers to explore the use of CFMs and MPPs, drawing on the Fund’s extensive country experience as well as conceptual work. The IV was quickly established as a framework for thinking through policy challenges created by capital flow volatility in the wake of UMP.

116. **While the Fund deserves credit for its responsiveness to member concerns, the ultimate influence of the spillover work appears to have been limited.** Even those favorably inclined to the Fund’s efforts often found the models used in the Spillover Reports to be quite opaque and unable to fully address EM policymakers’ concerns that the most challenging spillovers occurred through financial channels rather than the more conventional trade channels. Since the scaling back of spillover work as the Spillover Report was discontinued and spillover analysis folded into the *WEO*, researchers at central banks and in academia have been doing more of the innovative work on financial spillovers. Moreover, the impact of the spillover analysis on bilateral surveillance was quite limited. Though the ISD opened up a channel to allow for a

discussion of spillover concerns in Article IV consultations, its application has not had much impact on “source” country policies.

117. **Likewise, despite the Fund’s welcome agility in developing the IV, some members question whether it went sufficiently far in providing helpful guidance on using CFMs to respond to challenging circumstances.** The IV was generally welcomed by EM authorities as expanding their toolkit in principle and as a sign of Fund’s willingness to be flexible rather than doctrinaire on issues. In practice, however, there are questions whether this leeway has been exercised to allow policy advice on CFMs to be sufficiently tailored to country circumstances. While some countries such as Brazil reported a positive experience, other EM officials, particularly in Asia, think the IV has been applied too rigidly with considerable friction sometimes arising on how measures should be classified (such differences have occurred on occasion with AEs too). Moreover, they felt that IMF support for unorthodox policy interventions was too slow and grudging—India being an example. Some officials are dissatisfied with the insistence that CFMs should be viewed as last in a hierarchy of options rather than as part of a policy tool-kit. Given their policy constraints, these countries would like on occasion to use CFM pre-emptively and on a sustained basis rather than only after appropriate macroeconomic adjustment and then temporarily.

118. **As in the AEs, Article IV consultations with EM members are generally valued as a high-level check on policies but typically do not provide an in-depth discussion of monetary policy issues.** Article IV consultations are valued as a comprehensive discussion of policies in many areas and of the consistency of those policies in delivering desired macroeconomic outcomes. However, on monetary policy issues specifically, the Fund would need to bring much deeper expertise if it desires to provide greater value to central banks. Officials in many central banks noted that Fund staff advice, although sound on general economic grounds, was not operational enough nor with sufficient awareness of market dynamics to offer much practical guidance on the issues confronting them. As a result, over the past decade, many central bank initiatives were usually explained to the Fund later, rather than arrived at through an ongoing dialogue with the Fund. In examples where the IMF’s contribution was particularly appreciated, for example, support for China’s financial and exchange market reforms, analysis of exchange market intervention in Brazil, and modeling support for India’s introduction of an inflation targeting framework, it was based on detailed technical work. More typically, officials turned to central banking networks and BIS staff when they were seeking external input.

International monetary cooperation

119. **The Fund worked hard in the post-GFC period to contribute to international policy cooperation, but the record has been mixed.** Consistent with historical experience, the Fund has been most effective in responding quickly to provide emergency financing, less so in encouraging mutually supportive policies among members, including in application of the ISD to discuss spillover concerns in “source” countries.

120. **The Fund’s support to the G-20 is considered valuable but the influence on policy choices has diminished over time.** The G-20 has emerged as the leading body for discussion and coordination of economic policy issues. The IMF support of its work has been much appreciated, particularly in helping with the coordinated fiscal stimulus at the start of the GFC. The Fund’s development of exit principles from UMP at the urging of the G-20 was also regarded as useful. Subsequent G-20 initiatives, such as the MAP—which attempts to bring about policy commitments to support global growth—have to date yielded returns less than commensurate with the considerable expenditure of Fund staff time.

121. **The development of the FCL and PLL were steps forward but gaps remain in the global financial safety net.** The launch and use of the FCL and PLL, when previous attempts in this direction had failed, was a considerable achievement. Though take-up was limited, the experience of the countries that used these instruments was generally positive. Continued work is needed on design features of the FCL and on proposals for liquidity instruments that would command a consensus within the Fund’s membership.

Institutional issues

122. **Notwithstanding the considerable resources applied to bilateral surveillance—far greater in than any other international organization—a number of institutional issues seem to hamper the IMF’s value added, at least in the area of monetary policy that is the focus of this evaluation.**

- One concern is that while the bulk of macroeconomists doing this work are highly trained and understand monetary issues well, the Fund lacks a core of top, well-connected monetary policy experts to provide support to country teams, particularly when they face unprecedented circumstances and there is a need to think beyond the text book.
- Second, frequent turnover in mission chiefs and country teams makes it difficult for staff to develop relationships and the depth of country-specific expertise to make them a trusted advisor to central bank officials. Notable examples of influence—such as China and the euro area—are cases in which senior staff have worked for longer periods, and engagement is more intense than just a once a year Article IV consultation.

B. Recommendations

123. **To serve its member countries better in a core area of surveillance, the IMF needs to deepen its expertise on monetary policy issues and re-invigorate its work program.** While UMP are now being gradually reversed in many jurisdictions, monetary policy issues are likely to remain salient, and UMP may well be needed in the next downturn, which could well arrive when policy rates are still very low by historical standards. Four broad recommendations are offered below (Box 2), complemented by specific suggestions on how they could be implemented.

Box 2. IEO Recommendations for Board Consideration

Recommendation 1—Develop a small core group of top monetary policy experts at the IMF to keep abreast of and contribute to cutting-edge discussions in the central banking community, support institutional learning, and provide in-depth advice to country teams as and when needed.

Recommendation 2—Deepen work on the costs and benefits of UMP and related policies to develop a playbook on policy responses for use in future downturns. Building on the IMF’s comparative advantages, this workstream could draw on cross-country experience to assess and advise on the macroeconomic impact of different UMP, the relative use of monetary and fiscal policies as countercyclical stabilizers, and the roles of monetary policy and macroprudential tools to address financial stability risks.

Recommendation 3—Make sure that the Fund is at the forefront of financial spillover analysis and provision of advice on dealing with capital flows, drawing on its global multilateral mandate, universal membership, and breadth of country experience. The Fund’s advice on managing capital flow volatility could be reassessed in light of experience and changing circumstances. The recently initiated IEO evaluation on this topic could provide useful lessons for staff’s work on integrated policy framework now getting underway. The IMF’s work on financial spillovers could be re-energized, including further research on how finetuning the policy mix in “source” countries could help to alleviate adverse spillovers on “receiving” countries, which would help to foster greater international policy cooperation.

Recommendation 4—Draw on lessons from this evaluation to consider steps to deepen and enrich country engagement in bilateral surveillance. The measures needed to provide timely, value-added advice on monetary policies are likely to be relevant more broadly, and could be considered in the 2020 Comprehensive Surveillance Review. Longer tenure of mission chiefs, less turnover among country teams, and more engagement outside the Article IV cycle would help develop the deeper relationships and understanding of country circumstances that are critical for providing timely, value added advice on monetary policy and more broadly.

124. **Recommendation 1—Develop a small core group of top monetary policy experts at the IMF to keep abreast of and contribute to cutting-edge discussions in the central banking community, support institutional learning, and provide in-depth advice to country teams as and when needed.** The attention paid to monetary policy issues over the past decade does not seem to have been commensurate with its importance to the Fund’s mandate. The tasks of upgrading work on financial stability, mainstreaming macro-financial surveillance, and increasing work on new macro-structural issues have competed for surveillance resources. With the overall budget envelope likely to remain fixed, the Fund should consider how best to use its existing resources to raise the value added of advice on monetary policy issues.

Specific steps that could be taken:

- For the IMF to be regarded as a source of world-class advice on monetary policy, it is critical to develop a small core of internationally-recognized monetary policy experts headed at a very senior level. This core group would focus on applied monetary policy issues, with direct application to Fund policy analysis and advice. They would not only keep abreast of but contribute to cutting-edge discussions on frontier central banking issues, convene experts to confer on monetary policy issues of interest to Fund membership, and provide in-depth advice and guidance to country teams as and when

needed. There would be an ongoing two-way collaboration between the group of experts and area department teams to ensure that experts remain sensitive to policy needs and support the build-up of monetary policy expertise among country teams.

- Some changes in HR policy may be needed to attract, develop, and retain top experts. The current promotion policy places great weight on versatility and breadth of experience as the path to senior positions, but this comes at the cost of the depth of expertise needed to provide cutting-edge policy advice in challenging times. While the Fund draws its strength from exposing staff to cross-country experience, there should be scope to allow some staff to develop deeper expertise in specific topics, particularly in core areas like monetary policy. Thus, a top-flight group of monetary experts could be assembled by allowing some younger economists to develop careers based on a specialist expertise—the approach followed in many central banks—together with recruitment of some senior monetary policy experts from central banks (as has occurred in recent months). The Fund could use the expert track now being developed in the new Human Resource Strategy to ensure that these monetary policy experts have comparable promotion opportunities to “fungible” economists.
- Resources for this expert group could be allocated by rebalancing resources within MCM or the Fund more generally. It is worth emphasizing that—in contrast to the IEO’s assessment of the substantial resource needs for an upgrade of financial surveillance—the resources needed to raise the Fund’s game on monetary policy issues would be relatively modest.

125. **Recommendation 2—Deepen work on the costs and benefits of UMP and related policies to develop a playbook on policy responses for use in future downturns.** Building on the IMF’s comparative advantage, this work stream could draw on cross-country experience to assess the macroeconomic impact of alternative UMP instruments, the relative use of monetary and fiscal policies as countercyclical stabilizers, and the roles of monetary policy and macroprudential tools to address financial stability risks.

Specific steps that could be taken:

- An update of the 2013 Policy Paper on UMP to learn lessons from more recent experience would help inform the membership and position the Fund to provide advice on the use of UMP in future downturns. This update should include advice on the scope for negative interest rates and further central bank balance sheet expansion across different asset classes, and appropriate use of monetary and fiscal policies as countercyclical tools.
- An update of the 2015 Policy Paper on “Monetary Policy and Financial Stability” would be useful. Substantial recent work on the links between monetary policies and financial conditions and additional evidence on the effectiveness of macroprudential policies and

housing sector risks would make such an update valuable in refining, as needed, the Fund's existing policy positions on these topics. Dedicating some resources to following housing sector issues on a continuous basis would maintain the momentum generated by recent work in the *GFSR*.

- To strengthen the Fund's learning from cross-country experience, there could be quarterly or biannual internal reviews of monetary policy challenges faced by central banks in both advanced and emerging economies to identify consistency of advice and draw cross-country lessons. This could be done as part of weekly surveillance meetings rather than setting up a new process. The core group of monetary policy experts should be centrally involved in this review, offering reactions to major central bank policy steps in a timely fashion for use by country teams in Article IV consultations.
- The proposed update of the 1999 Code of Good Practices in Transparency in Monetary and Financial Policies provides a good opportunity to reflect the Fund's latest views on how the governance and accountability of central banks can be enhanced.
- As future use of UMP is likely to generate more debate about its likely distributional effects, the "operationalizing inequality" work stream at the IMF could analyze the distributional impacts of such policies to provide the basis for IMF policy guidance on this issue.

126. **Recommendation 3—Make sure that the Fund is at the forefront of financial spillover analysis and provision of advice on dealing with capital flows.** Initiatives over the past decade to assess spillovers and advise countries, particularly emerging markets, on how to deal with them have been welcome but met only partial success. However, the challenges to individual countries and problems for international policy cooperation arising from liquid and open capital markets, and increasingly international investment portfolios, are only likely to increase. The Fund should be ready to reassess its policy framework to guide its advice on how countries should handle volatile capital flows in light of experience and changing circumstances. Research on the financial spillovers from UMP and other policies adopted by "source" countries could be reenergized which could feed into new initiatives to strengthen cooperative behavior across the membership to limit negative aspects of financial spillovers as far as possible. The Fund is the best-placed international financial institution for developing such initiatives given its global multilateral mandate, universal membership, and the depth of country experience on which it can draw.

Specific steps that could be taken:

- Further assessment of IMF advice on capital flows in light of experience and changing circumstances: As a first step, the IEO evaluation on this topic now being initiated will look into how CFMs and other measures have worked in practice to help deal with capital flow volatility, seek views on how they can be best integrated into countries' overall

economic strategies, and assess the value added and traction of IMF advice in this area. This work could provide useful lessons for staff's broader work agenda on an Integrated Policy Framework that is now getting under way.

- Re-energizing work on financial spillovers: Spillover work at the Fund, particularly on financial spillovers, seems to have lost momentum and impact since the Spillover Report was discontinued. The Fund should rebuild its focus and institutional expertise on understanding financial spillovers, which could include further work on how different policy approaches in "source" countries could affect spillovers on "receiving" countries. In addition to the spillover work featured in the *WEO*, the Fund could look for other prominent avenues to showcase staff's spillover analysis. For instance, this work could be made a regular feature at the Annual Research Conference, where there is a natural gathering of top academics and policymakers who are interested in these issues.
- Increased attention to promoting international monetary cooperation: Deepened research and analysis on financial spillovers could underpin more forceful efforts by the IMF to advise countries implementing UMP on how policy approaches could be fine-tuned to promote their own domestic objectives while limiting adverse spillovers, as part of Article IV surveillance consistent with the multilateral mandate under the ISD. At the same time, the Fund could support some "blue-sky thinking" towards developing a Code of Conduct (somewhat similar to that agreed among the G-7 on monetary and exchange rate issues) under which major countries would agree to follow policies and practices as far as possible consistent with minimizing adverse spillovers while recognizing the primacy of domestic objectives.

127. **Recommendation 4—Draw on lessons from this evaluation to consider steps to deepen and enrich country engagement in bilateral surveillance.** The influence and value added of the Fund's advice on monetary policy at a country level seems limited by broader institutional constraints, including rapid turnover of country assignments that impedes developing deep relationships and understanding of country circumstances and the relatively limited direct engagement outside the annual Article IV cycle. There are also continuing concerns about the effectiveness of learning from cross-country experience and thinking through policy tradeoffs across the macroeconomic framework, both particularly important in unprecedented circumstances and areas where the IMF should have a comparative advantage. While this evaluation has focused on monetary policy advice, the IEO believes that such issues are also relevant for IMF bilateral surveillance more generally, hence the broad recommendation that these issues be considered in the context of the 2020 Comprehensive Surveillance Review now getting under way.

Specific steps that could be taken:

- Longer tenure of mission chiefs and less turnover among country teams would help to build deeper relationships and understanding of country circumstances, increasing the

potential for the Fund to serve as trusted advisor, and even to be more confident in pushing back against central bank decisions when this seems warranted. While there are a variety of considerations relevant to determining tenure of country assignments, the evidence in this evaluation reinforces findings in earlier evaluations of the benefits of longer country assignments. Greater attention to ensuring effective handover could also help mitigate the costs of frequent turnover of country desks.

- Country engagement needs to be more continuous. Opportunities should be sought outside of Article IV to build contacts with and provide international perspectives to central bankers. Teams should be encouraged to participate in or host conferences and workshops that delve more deeply into specific issues of concern.

ANNEX 1. LIST OF BACKGROUND PAPERS

BP/19-01/01. “IMF Advice on Unconventional Monetary Policies to Major Advanced Economies,” by Laurence Ball

BP/19-01/02. “IMF Advice on Unconventional Monetary Policies to Smaller Advanced Economies”

Chapter 1—Canada, by Luc Everaert

Chapter 2—Denmark, Switzerland, Sweden, and the Czech Republic, by Patrick Honohan

BP/19-01/03. “IMF Advice on Unconventional Monetary Policies to Selected Asian Economies”

Chapter 1—China and India, by Rakesh Mohan

Chapter 2—Korea and Selected ASEAN Economies, by Reginald Darius and Prakash Loungani

BP/19-01/04. “IMF Advice on Unconventional Monetary Policies to Selected Emerging Markets”

Chapter 1—Brazil and Mexico, by Eduardo Borensztein

Chapter 2—South Africa, by Reginald Darius

Chapter 3—Turkey, by Sebnem Kalemli-Ozcan

BP/19-01/05. “The Risks and Side Effects of UMP: An Assessment of IMF Views and Analysis”

Chapter 1—UMP and Risks to Financial Stability, by Philip Turner

Chapter 2—IMF Analysis of Housing Markets, by Alessandro Rebucci and Jianping Zhou

Chapter 3—Distributional Impact of UMP, by Pierre Monnin

BP/19-01/06. “IMF’s Work on Encouraging International Policy Cooperation”

Chapter 1—International Monetary Cooperation, by Catherine Schenk

Chapter 2—IMF Spillover Analysis, by Michael Klein

BP/19-01/07. “Frontier Issues in Central Banking: An Assessment of IMF Contributions”
by Luc Everaert, Andrew Levin, Prakash Loungani, Roxana Pedraglio, Willi Semmler, and Philip Turner

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