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BACKGROUND PAPER

BP/19-01/01

IMF Advice on Unconventional Monetary Policies to Major Advanced Economies

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May 14, 2019

Contents

ABBREVIATIONS

AE	advanced economy
APD	Asia and Pacific Department (IMF)
APP	Asset Purchase Program
BoE	Bank of England
BOJ	Bank of Japan
EA	euro area
ECB	European Central Bank
EUR	European Department (IMF)
FOMC	Federal Open Market Committee
GDP	gross domestic product
GFC	Global Financial Crisis
IMF	International Monetary Fund
LTROs	Longer-Term Refinancing Operations
MBS	mortgage-backed securities
MCM	Monetary and Capital Markets Department (IMF)
MEP	Maturity Extension Program
MPC	Monetary Policy Committee
OMT	Outright Monetary Transactions
PN	Policy Note
QE	quantitative easing
QQE	quantitative and qualitative easing
RES	Research Department (IMF)
SGP	Stability and Growth Pact
SME	small and medium-sized enterprises
SMP	Securities Markets Program
SPR	Strategy, Policy, and Review Department (IMF)
UMP	unconventional monetary policies
VAT	value-added tax
WEO	*World Economic Outlook*
WHD	Western Hemisphere Department (IMF)
YCC	yield-curve control

EXECUTIVE SUMMARY

This paper provides an assessment of IMF advice to the United States, the United Kingdom, the euro area, and Japan over the past decade on unconventional monetary policies (UMP). It relies on an extensive desk review of IMF public and internal documents and interviews with Fund staff, central bank officials, and outside experts.

IMF advice: In the case of the United States and the United Kingdom, there was little difference between the Fund's official views and those of the authorities. Central banks in these countries moved fairly rapidly towards UMP, with staff largely reacting to and validating the actions taken. In the two other cases, the central banks were slower, and the Fund was in front at times in urging stronger action in easing monetary policies. Fund staff supported the withdrawal of fiscal stimulus from 2010 onward, thereby increasing the heavy dependence in these countries on monetary policies to support the recovery and avoid deflationary risks. This advice was modified as recoveries proved weaker than expected, with greater emphasis placed on credible medium-term fiscal strategies than immediate adjustment.

Assessment: The authorities generally found the bilateral consultations with the Fund a useful sounding board for their views on monetary policy during a very challenging period and provided helpful public validation of unprecedented policy interventions, although there were only a few occasions where IMF advice influenced policy decisions. Some outside observers expressed concern that the Fund was effectively rubber-stamping central bank actions but there were times when Fund advice challenged central banks to take more aggressive action. This was particularly so in the case of the European Central Bank, where discussions with Fund staff were credited as influential in building the case for UMP and thinking through some design features. In general, however, the Fund was not seen as a source of cutting-edge ideas on monetary policy. While the Fund's cross-country work in multilateral surveillance was praised as providing useful context, authorities felt that discussions of spillovers of their policies as part of the bilateral consultations did not add much value.

Fund advice was formulated after considerable internal debate, particularly in the case of the actions by the U.S. Federal Reserve, but lacked a structured process for sharing experience across country teams and analyzing lessons. Weaker-than-expected impacts of UMP did not trigger a systematic attempt to use the forecast errors to calibrate advice on UMP or on the appropriate mix between monetary and fiscal policies. Authorities suggested that longer tenures for mission chiefs and staff members on country assignments would help the quality and impact of Fund advice. However, it was emphasized that the Fund could never hope to match the depths of monetary policy expertise of their own staff.

In sum, IMF advice on monetary policy to these countries over the past decade was useful but there is room for greater value added through greater depth of expertise, a more structured process of knowledge-sharing among country teams, and greater attention to policy mix issues and cross-border spillovers.

I. INTRODUCTION

1. This paper provides an assessment of IMF advice on unconventional monetary policies (UMP) to the United States, the United Kingdom, the euro area, and Japan over the past decade. In these countries, slow recovery and deflationary concerns pushed central banks to adopt a series of policy innovations, even after the initial impact of the Global Financial Crisis (GFC) had receded. They have also had to be attentive to the possible side-effects of these exceptional policies and, more recently, on how to unwind them as more robust recoveries take hold. This environment, in which central banks (and the Fund) have had to think well "outside the box," has also posed a challenge for the IMF on how to provide valuable advice to help countries meet domestic objectives while also—given the IMF's mandate—bringing attention to the international consequences of policy choices. In this context, this paper reviews advice provided on the broader policy mix as well as on monetary policy more narrowly.

2. The assessment relies on desk review of public and internal documents and extensive interviews. Nearly all IMF mission chiefs over this period were interviewed, as were current and former senior officials at the associated four central banks (as well as the Bundesbank and the Banque de France), and monetary policy experts in academia, think tanks and financial markets. The most important sources for the desk review are the Article IV reports, which not only present the policy views of Fund staff but also compare them to the views of central bank officials. This comparison is particularly useful in the case of the euro area and Japan, where there were sharper disagreements than in the two other cases. For the U.S. and U.K. cases, the comparison of the Fund and authorities' views was augmented by using the Federal Reserve's (Fed) July Monetary Reports to Congress and the Bank of England's (BoE) Inflation Reports. Management speeches and blogs by Fund senior staff were also consulted as part of the public record of the Fund's views.

3. The review also draws on internal Fund documents such as back-to-office reports, department comments on the Policy Notes (PN) prepared before the Article IV consultations, and presentations by staff at the weekly surveillance meetings. The latter are a valuable source of information because they were co-chaired by the IMF's Economic and Financial Counsellors, attended by senior staff from all area and functional departments, and featured presentations and discussions on financial and real sector developments during the previous week, followed by thematic presentations on issues of the day. The presentations and the discussions around them were summarized in a joint memorandum from the Counsellors to management.

4. Section II describes IMF advice in the four cases. In the United States and the United Kingdom, there was little difference between the Fund's official views and those of the central bank. These central banks moved fairly rapidly towards UMP, leaving Fund staff in the mode of largely reacting after the fact and validating the actions taken. In the other two cases, the central banks were slower in their actions, and the Fund was out in front for some time in urging stronger action in easing monetary policies. Section III provides an assessment of the value added by, and influence of, the Fund's policy advice.

II. Country Experiences

A. United States

Key policy developments

5. The bold steps taken by the U.S. Federal Reserve (the Fed) are well known. As summarized in Kuttner (2018), after policy interest rates had been reduced to virtually zero by November 2008, the core of the Fed's unconventional actions was to launch a series of asset purchase programs, commonly referred to as QE1, QE2, and QE3, and the Maturity Extension Program (MEP; sometimes also called Operation Twist).

6. QE1 was announced in November 2008 and was extended in March 2009. It was mainly aimed at supporting liquidity in key financial markets and involved purchases of debt issued by government-sponsored enterprises (Fannie Mae, Freddie Mac, and Ginnie Mae) and mortgage-backed securities (MBS). Subsequent asset purchase programs were aimed at combatting persistent deflationary concerns in the context of an initially sluggish recovery. QE2, launched in November 2010, involved purchases of longer-term Treasury bonds. MEP, initiated in September 2011 and extended in June 2012, involved the swap of longer-term for shorter-term Treasuries to put downward pressure on longer-term interest rates. QE3, which started in September 2012, also involved purchase of mortgage-backed securities and treasuries but differed from the previous programs in being open-ended and not setting a dollar limit on the amount of the purchase.

7. In addition to the asset purchase programs, the Fed innovated in how it provided "forward guidance" for future policy actions. In 2008–09, Federal Open Market Committee (FOMC) statements said that policy interest rates were likely to remain low "for some time" or for an "extended period." By 2012, this forward guidance became more explicit and was tied to specific developments in the economy, such as the unemployment rate, but in December 2013 reverted to an open-ended qualitative commitment to keeping rates low.

8. As the recovery became more robust, the Fed's attention turned to winding back asset purchases and raising interest rates to more normal levels. The market's uncertainty about the Fed's exit plans may have been a factor in the "taper tantrum" of June 19, 2013, when a suggestion by then-Chair Bernanke that the Fed may exit UMP roiled financial markets. In contrast, or perhaps because lessons about the importance of clarity in communications had been learned, the actual "lift-off"—the increase in policy rates in December 2015—and the winding down of asset purchases thus far has generally occurred more smoothly, as the Fed has paid considerable attention to laying out its policy normalization process.

9. Significant fiscal and macroprudential stimulus measures were also introduced in the wake of the crisis to support the economy. Notably, the Economic Stimulus Act of 2008 provided individual tax rebates, business tax incentives, and eased mortgage lending requirements for the

government-sponsored enterprises; the Troubled Asset Relief Program of 2008 provided support to the financial sector through asset purchases; the Supervisory Capital Assessment Program of 2009 addressed capital shortfalls of major financial institutions; and the American Recovery and Reinvestment Act of 2009 further cut individual taxes, extended unemployment insurance benefits, reduced payroll taxes, and boosted infrastructure spending. These steps were estimated by staff to have raised the general government structural primary deficit by nearly 6 percentage points of potential GDP between 2007 and 2010.

10. However, by 2010, with signs that the economy had bottomed out, the focus of fiscal policies shifted toward exit. The FY2011 budget set the objective of halving the federal deficit by 2012 and achieving a primary balance by 2015 consistent with the G-20's Toronto Summit Declaration in the summer of 2010.[1] While these objectives were not fully met, a significant fiscal contraction was set in train, and the federal government's structural primary balance was reduced by roughly 6 percentage points by 2015, fully reversing the earlier stimulus. In the next two years, the fiscal position was roughly neutral to mildly stimulative until the major tax cuts that were introduced by the new administration, which staff estimated helped boost the 2018 structural deficit by 1 percent of GDP.

IMF monetary policy views and advice

11. Before delving into the details, some general observations about IMF views on the Fed actions during the period under review might be useful. Generally, the Article IV reports for the United States paid much more attention to fiscal policy—supporting both the fiscal stimulus in 2009 and the turn to consolidation a year later—and repair of the financial system than to monetary policy issues. On the latter, the Fund's published staff reports mostly expressed approval of Fed actions or at least did not contain any criticisms. But while expressing public support, IMF staff had active internal debates about the effectiveness of UMP, particularly at the weekly surveillance meetings. In the end, the consensus view was to not express public doubts about the programs but to advocate exit from these exceptional measures as soon as feasible and to stress other policy steps that were needed to promote recovery. This meant that—by always mentioning exit—the Article IV reports tended to have a more hawkish tone than the Fed's monetary policy reports, despite the Fund's outlook for the U.S. economy generally being more pessimistic than the Fed's (partly because it had a less positive view about the likely impacts of UMP).

12. 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 as soon as feasible. To some extent, the Fund's focus on exit was also 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 items that were implicitly hawkish: discussions of limits on

[1] State and local governments—which are generally required to balance their budgets—also went through a substantial budgetary contraction over this period.

the scope for further 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 of a 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.

13. Turning now to the details, while the Fund supported QE1, the 2009 Article IV report and a staff note to the G-20 meeting in October 2009 (a draft of which was discussed internally at the weekly surveillance meeting on July 28) emphasized the challenges for policy of unwinding these actions over the next several years. The G-20 note worried about the large capital losses the Fed could face from the MBS assets on its balance sheet and saw some merit in holding assets to maturity to avoid these losses. While both documents advocated erring on the side of caution in the timing of exit, there was no discussion of a possible need for additional monetary stimulus (beyond the statement that more could be done if it proved necessary) and there was a reminder of the longer-run risk of inflation.

14. In contrast, though the Fed was more optimistic than the Fund staff about the prospects of economic recovery, its July 2009 Monetary Report nevertheless noted the additional stimulus actions that were possible and emphasized plans to purchase more assets by the end of the year. There was discussion of plans to unwind "at some point" but it was emphasized that this would not be an issue for a while.

15. The somewhat hawkish tone at the Fund continued in 2010–11. In the deliberations during the internal surveillance meetings, staff from the Monetary and Capital Markets Department (MCM) cautioned on March 2 that UMP was "no panacea" and needed to be undertaken carefully as these operations "are in essence fiscal;" participants at the meeting agreed that there was "considerable uncertainty about their effects on market interest rates and macroeconomic performance." Publicly, the 2010 Article IV report released over the summer agreed that monetary "accommodation can be maintained" but also suggested that the problems ailing the U.S. economy were to some extent structural in nature and hence required actions beyond monetary policy. Specifically, the Fund suggested that U.S. structural unemployment had risen and devoted a Selected Issues paper to the topic.

16. The pattern of private concerns and public endorsement continued over the remainder of 2010 and into the following year. At the surveillance meeting on October 19, 2010, staff noted that the Fed had signaled the introduction of the QE2 program due to their concerns about the persistence of high unemployment and the downward trend in core inflation. The memorandum to management observed that "there was broad staff consensus that QE2 is likely to have a limited impact on raising private demand and improving recovery prospects" in the United States. Staff from the Western Hemisphere Department (WHD) estimated that QE2 would only "boost real GDP by around 0.2 percent over the next years" and have a small impact on unemployment. WHD staff felt that QE2 "could be justified as a second-best option given that the legislative gridlock in Congress is likely to prevent the implementation of targeted policies"

to reduce the debt overhang of households, which would have likely enabled a stronger recovery.

17. Despite the public endorsement of QE2, the 2011 Article IV continued to advocate preparation for exit from UMP, calling for a sharp shrinkage of the monetary base from $2.8 trillion to $1.0 trillion over six years. The Fed's monetary report did not include anything similar and noted that the Fed was still planning to unwind policy "eventually." Even though the Fund was still less optimistic about economic prospects than the authorities, the Fund assessed there was limited room for further easing because of the large balance sheet and "firming of core inflation."

18. The Fund's tone started to change in 2012, and over 2012–15 there was not much difference between publicly-reported Fund and Fed views.[2] In 2012, neither discussed exit very much. While the Fund returned to the theme of the causes of U.S. unemployment it now emphasized hysteresis effects, namely the dangers of high cyclical unemployment turning structural if policy actions to maintain aggregate demand were not sufficiently vigorous. The effectiveness of QE3 was debated at a surveillance meeting in September 2012, a week after the announcement of the program. MCM continued to express skepticism that the likely macroeconomic benefits justified the risks to financial stability, but WHD argued that such skepticism was "premature" and that QE3 showed the determination of the Fed to do "whatever it takes to improve economic conditions." In 2013, the Fund remained supportive of Fed actions and their beneficial effects, though it also emphasized the need to assess financial stability implications of monetary accommodation.

19. Over this period, particularly after markets threw their taper tantrum in the summer of 2013, the Fund started to worry more about how the exit process would work. At the surveillance meeting on June 4, 2013, MCM noted that uncertainty about the Fed's exit strategy—markets expected that the Fed would begin tapering asset purchases but were unclear on the timing and speed of exit—had increased market volatility. Research Department (RES) staff highlighted the "difficulties in monetary policy communication, with wide-ranging views among the Fed's Board at present." The importance of clarity in Fed communications was stressed in both the 2013 Article IV report and in the Fund's multilateral documents.

20. In 2015, with the prospect of interest rates rising soon, the Fund actually turned more dovish relative to the Fed. The Fed stated its intention to start raising rates in 2015 but the Fund suggested in the 2015 Article IV staff report that the Fed should wait until 2016. The Fund discussed both the risks of raising rates too quickly and of raising them too slowly but emphasized the former. In 2016, the Article IV suggested that the Fed should accept an overshoot of the 2 percent inflation target and then approach the target from above, in contrast to the Fed, which consistently stated that inflation should converge to 2 percent from below.

[2] This was also a time of heightened concerns about the slow U.S. recovery.

21. In recent years, the Fund has supported the Fed's plans for normalization interest rates, but has urged a more gradual pace of rate hikes than in previous tightening cycles "given the downside risks to inflation and the asymmetries posed by the effective lower bound" and that the unwinding of the Fed's balance sheet should also be gradual and "well-telegraphed at an early stage." The Fund also noted in 2018, however, that "given the planned fiscal stimulus," the Fed will need to raise policy rates "at a faster pace" than otherwise.

IMF advice on the policy mix

22. As was the case with monetary policy, for the most part in discussing fiscal policy staff endorsed both the U.S. authorities' initial stimulus and the subsequent shift to contraction. However, despite staff being more concerned about the likely depth of the recession and (subsequently) about the pace of recovery, its fiscal policy advice tended to the hawkish side, emphasizing the looming long-term fiscal problem and the need for eventual exit.

23. Concerns about medium-term fiscal sustainability were voiced already in the 2009 report, although it did offer the possibility of additional fiscal stimulus if "it was set within a credible medium-term fiscal framework." And as the focus of U.S. fiscal policy turned toward consolidation in 2010, staff welcomed the authorities' commitment to halve the (headline) federal deficit by 2012, which the staff estimated would reduce the federal structural primary deficit by 2 percent of GDP in FY2011. This turn toward consolidation was mirrored by the 2010 G-20 Toronto Declaration, in which "advanced economies have committed to fiscal plans that will at least halve deficits by 2013 and stabilize or reduce government debt-to-GDP ratios by 2016."

24. However, by 2012 staff worries about the fragility of the recovery and fears that political gridlock would lead to a "fiscal cliff" led to explicit calls for a more gradual pace of adjustment. Nonetheless, these warnings were still muted by staff's observation that the authorities were significantly underestimating the measures needed to address the long-term budget challenge. Also, while the procyclical adjustment by the state and local governments was acknowledged, this did not seem to figure into the staff's policy recommendations. By 2016, with the recovery well established, staff fiscal advice returned more squarely to consolidation.

25. Staff advice in the years following the onset of the GFC seems not to have addressed how different policy mixes could achieve domestic goals or the impact on other countries. However, the 2014 staff report noted (albeit largely in passing) that the planned withdrawal of fiscal stimulus meant that monetary policy would need to remain looser for longer than otherwise, with potentially greater consequences for financial stability in the rest of the world.[3] The 2017 staff report also cautioned against the new administration's planned fiscal stimulus, noting that this would require a more accelerated monetary policy normalization and cause an even greater overvaluation of the dollar. In 2018, staff cautioned that the procyclical expansion of

[3] A more muted but similar point was also made in the 2010 report.

the fiscal deficit could trigger inflation pressures, a faster-than-otherwise normalization of interest rates, and disruptive reversal of capital flows from emerging markets.

26. The implications of the significant reforms of financial sector regulation for the stance and impact of macroeconomic policies seemed to receive limited attention.[4] For example, staff in 2010 called for tighter bank capital requirements to address potential financial stability risks but provided little analysis of the potential effect this might have on the recovery. And staff reports tended to encourage full implementation of the 2010 Dodd-Frank reforms without considering their possible procyclicality.[5] Indeed, in 2015 staff analysis was presented that seemed to show that higher bank capital increased corporate investment.

B. United Kingdom

Key policy developments

27. The Bank of England (BoE)'s actions were somewhat similar to that of the Fed's: there were three rounds of QE between 2009 and 2012 and active use of forward guidance in 2013–14 (Dell'Ariccia, Rabanal, and Sandri, 2018). Unlike the Fed, however, the BoE undertook an additional round of QE in 2016 after the "Brexit" vote—the referendum in which the United Kingdom voted to leave the European Union—amid increased concerns about the short-term economic outlook. QE was mainly focused on purchases of long-term government securities, but the BoE also took a number of steps to support bank lending.

28. The BoE's first round of QE was launched in 2009 after a sharp cut in policy rates from 5.75 percent to 0.5 percent—which the BoE perceived as its effective lower bound—had failed to revive the U.K. economy from the effects of the GFC. QE1 was completed in January 2010, and a recovery—albeit a subdued one—ensued. In October 2011, QE2 was announced as the economic outlook was again threatened, this time by the intensification of the euro area crisis. QE2 was launched even though the inflation rate was 5 percent—above target due to increases in the value added tax (VAT) and energy prices. A third round of easing in July 2012 brought the cumulative size of QE purchases to about 35 percent of the outstanding stock of U.K. government bonds.

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[4] However, staff clearly recognized the possibility that U.S. interest rates had implications for financial stability, both domestically and abroad, which was highlighted in the 2015 staff report.

[5] Concerns about the possibility that regulatory reforms would adversely affect economic growth attracted attention, particularly with the June 2010 publication by the Institute of International Finance of estimates suggesting that regulatory reforms could shave ½ percentage point from annual GDP growth among the G3. These estimates were countered by the Fund in Santos and Elliot (2012), who argued that the effects would be smaller since regulatory costs would be absorbed by cutting expenses and the effect of heightened financial stability on required returns.

29. The persistence of inflation above target created uncertainty about whether the BoE would raise rates despite weak economic growth. In August 2013, the BoE provided forward guidance that it would not raise rates or unwind asset purchases until unemployment declined below 7 percent, unless there was a big shift in inflation expectations or a significant threat to financial stability. In February 2014, as unemployment approached 7 percent, the BoE signaled that it nevertheless planned to keep rates low for a while. In August 2016, the BoE cut its policy rate from 0.5 percent to 0.25 percent and launched QE4 to sustain economic growth in the face of uncertainties generated by Brexit.

30. In addition to its QE programs, the BoE also launched several programs to support bank lending, the most notable of which was the Funding for Lending scheme in July 2012 and the Term Funding Scheme launched in August 2016, after the Brexit vote.

31. U.K. fiscal policy turned from stimulus relatively early in the crisis, reflecting at least in part a desire to restore the discipline over budget policies that was felt to have been lost earlier in the decade. The structural primary budget balance (general government basis) had moved from a surplus in 2000 to a deficit of 3 percent of potential GDP in 2007, and with the onset of the crisis, stimulus measures took the deficit to 7½ percent of GDP in 2009. Thereafter, fiscal policy turned toward “austerity” and exit. The 2010 budget speech committed to eliminating the structural current budget deficit within five years. Although progress toward this goal was affected by a sluggish recovery, the structural primary deficit moved steadily downward to reach a balanced position by 2017.

IMF monetary policy views and advice

32. U.K. Article IV reports suggest that staff views were generally close to those of the BoE, a closer correspondence than in the cases of the other three central banks discussed in this paper. Interviews with both Fund staff and BoE officials confirmed that there were few differences of opinion. There were at times significantly different views within the BoE’s Monetary Policy Committee (MPC) over this period. In such cases, Fund staff views ended up generally fairly close to the majority view on the MPC (which determined the actions taken by the BoE).

33. One striking example of the congruence of staff and BoE views was on the effective lower bound. The BoE, unlike central banks of other major advanced economies (AEs), never reduced the policy rate below 0.5 percent, believing that lower rates would have an adverse effect on the banking system. This policy was supported without much probing by the Fund staff, even after the divergence from practice elsewhere as other European central banks started moving to negative interest rates.[6] It is not clear whether the BoE policy was justified by features of the banking system that were not present elsewhere.

[6] An exception is the 2012 Article IV report as noted below.

34. Another general comment is that there was much less internal debate within the Fund, for instance at the weekly surveillance meetings, over the BoE's actions than over the Fed's. This may simply reflect the fact that the debates occurred when the Fed took its actions and were not repeated when the BoE followed a few months later, and that the Fed's actions may have been perceived as more critical to the overall global outlook.

35. Turning to the details, the 2009 Article IV report stated that the "Bank of England's strategy of aggressive monetary easing is appropriate." Fund staff made a case for expanding QE into private credit markets that were dysfunctional after the GFC. The BoE "noted that efforts in this direction were underway, but that setting up appropriate facilities took time." The following summer's report generally praised the BoE's "unprecedented monetary easing" and presented evidence that QE had been effective at reducing long-term yields and "bolstered the recovery." The report concluded that the current accommodative stance was "appropriate for now," but "the MPC will have to be nimble in responding to new developments." This view was similar to the BoE's November inflation report, which stressed uncertainty about inflation and stated that "the Committee stood ready to respond in either direction" to new developments. One MPC member favored less stimulus and another favored more, but the staff agreed with the stance of the MPC majority.

36. Toward the end of 2010, the U.K. economy had been growing at 4 percent for the two most recent quarters and inflation remained above target at 3 percent. How the BoE should respond was vigorously debated at the internal surveillance meeting in November. The consensus view at the end was that the BoE should begin a "tightening cycle if inflation and growth continue on the upside" but resume asset purchases should "downside risks materialize." As uncertainty about the growth and inflation outlook persisted over the coming months, the 2011 Article IV supported a mix of "relatively tight fiscal and relatively loose monetary policy" and concluded that the "overall tightness of policy remains appropriate." The staff's call for loose monetary policy was not uncontroversial at the time, given the spike in inflation and the fact that some MPC members were calling for interest rate hikes.

37. The 2012 Article IV report stands out as a dovish outlier, pushing the BoE for a more expansionary stance than the MPC was pursuing, and influencing BoE's decision to adopt credit easing measures. The mission raised concerns about hysteresis in unemployment and it questioned the 0.5 percent lower bound on the policy rate, citing the practices of other central banks. The BoE did not agree with these points, noting that the MPC opposed a rate cut, outlining its reservations about purchasing private sector assets, and arguing that there was little evidence of hysteresis effects. Nonetheless, the 2012 mission appears to have influenced the BoE's decision to introduce credit easing measures. During the mission, such measures were being debated within the BoE, and staff advocated for such measures in its concluding statement. In discussing the adoption of the FLS and the Extended Collateral Term Repo Facility (ECTR) in their July 2012 statement to the IMF Board on the U.K. Article IV staff report, the U.K.

Executive Director stated that "These schemes were in line with recommendations made during the Article IV mission."

38. In 2013, the report returned to a conservative tone on monetary policy, noting that "notwithstanding bold action, transmission of monetary policy has been weak" and therefore, it was important to "maintain accommodation, but temper expectations of effectiveness." The Article IV focused much more on policies to strengthen the banking system and on fiscal policy, which should be adjusted to reduce the "drag on growth" caused by consolidation. In interviews, Fund staff noted that it was felt that monetary policy could not do much more, so the staff focused its advice on fiscal policy. The Article IV report indicated that the turn to fiscal consolidation since 2010 had weighed on growth and recommended that the effects of the fiscal tightening envisaged in the budget be offset by bringing forward capital investments and taking other steps.[7]

39. By 2014, exit was in the air. The 2014 Article IV discussed the pros and cons of starting tightening by raising rates or by shrinking balance sheets, noting that the MPC thought that raising rates first was the better policy. The 2015 Article IV report called for monetary policy to remain loose and the 2016 Article IV also issued a dovish warning against tightening too quickly: "Monetary policy should stay on hold until inflationary pressures are clearer." As in the case of the Fed, the report noted that the risks of undershooting and overshooting the inflation target were asymmetric and that "some moderate overshooting of the 2 percent target may even be desirable." In 2017, despite a broadly closed output gap and above-target inflation, the Fund advocated only a gradual withdrawal of monetary stimulus, noting that an accommodative monetary policy remained essential to support domestic demand in the context of continued uncertainty about the shape and timing of "Brexit." It also called for a flexible response to developments and dropped references to overshooting on the inflation target.

IMF advice on the policy mix

40. As in the case of the United States, the staff's fiscal policy advice to the United Kingdom turned quickly to exit. This was even apparent in 2008, when despite the weak data that required a supplement to the staff report, staff reiterated its view that the planned narrowing of the structural balance by 1 percent of GDP in 2009 and 2010 should be viewed as a minimum, in contrast to the authorities' position at that point that a more aggressive consolidation was unwarranted given the risks to the outlook.

41. But as the severity of the crisis became more apparent, the Fund's fiscal hawkishness diminished. In the 2009 staff report, the continued call for more ambitious efforts to contain the budget deficit was made conditional on signs that the recovery was better established. Beginning in 2010, staff endorsement of the authorities' plans for frontloaded fiscal consolidation was

[7] Earlier, in April 2013, chief economist Olivier Blanchard had characterized the austere U.K. fiscal policy as "playing with fire" (Blanchard, 2013).

coupled with an acknowledgement of the "austerity" debate, the recommendation that automatic stabilizers be allowed to operate freely, and a suggestion that temporary tax cuts be introduced if the downturn was prolonged. By 2012, with signs that the recovery had stalled, the possibility of additional fiscal support was given greater weight, and (as noted above) in 2013 the staff report, and the Fund's chief economist explicitly called for delaying consolidation, in contrast to the authorities, who viewed "any deviation from the announced plan for fiscal consolidation [as] too risky."

42. As the post-crisis period unfolded, the policy mix received increasing attention. While in 2009 staff's main worry was that the large fiscal deficit would undermine confidence in the BoE's inflation target, by 2010 staff argued that monetary accommodation would be important to offset the effects of the fiscal contraction. In 2011, staff explicitly asked whether a shift in the mix was warranted given weak growth, but concluded that "the answer is no." Even with the signs in 2012 that the recovery was falling short, monetary policy and credit easing measures were still viewed as the first line of defense. However, as noted above, by 2013 staff's confidence in the effectiveness of QE had diminished and concerns about growth had escalated to the point that staff finally turned toward a call for slowing the pace of consolidation.

43. By the time of the 2014 consultation the recovery appeared to have solidified, and so the thrust of the staff's fiscal policy advice returned to consolidation. In the 2015 staff report, the government's plans for a measured pace of budget consolidation was viewed as appropriate, albeit with scope to allow automatic stabilizers to operate if necessary and to improve its growth friendliness by reforming the tax and transfer systems. In 2016, staff encouraged a more gradual fiscal consolidation to avoid overburdening monetary policy, and while the 2017 report seemed to endorse the further postponement of a balanced budget, it seemed to tilt toward tighter fiscal policies, including to help avoid further undermining market confidence ahead of Brexit.

C. Euro Area

Key policy developments

44. Monetary policy actions in the euro area since 2008 can be considered in three phases (Dell'Ariccia, Rabanal, and Sandri, 2018). After cutting the policy rate to 1 percent, the European Central Bank's (ECB) in 2008–09 focused on liquidity support for the banking sector. Over 2010–12, the ECB's attention turned to addressing the euro area debt crisis, particularly by purchasing government bonds issued by the "crisis countries." Starting in 2013, with widening concerns about the weak recovery in the euro area, the ECB used forward guidance, introduced negative interest rates, and launched QE—a large-scale asset purchase program—to provide additional monetary support.

45. The initial response of the ECB to the global financial crisis was to counter the sharp decline in interbank trading, which was cutting off funding to nonfinancial corporations. Bank financing accounted for about 70 percent of external financing for euro area firms, whereas U.S.

firms relied on market-based sources for about 80 percent of their external financing. These actions took the form of Longer-Term Refinancing Operations (LTROs), U.S. dollar swap lines with the Fed, expansion in the acceptable collateral for refinancing operations, and a Covered Bond Purchase Program.

46. In 2010, as Greece, Ireland, and Portugal slipped into crisis, the ECB scrambled to contain severe strains in government securities markets across the euro area by purchasing debt issued by these countries, and later Italian and Spanish debt as well, under its Securities Markets Program (SMP). The bonds were purchased in the secondary market to avoid contravening the rule against monetary financing of governments by the ECB (Article 123 of the Treaty on the Functioning of the European Union). As concerns about the break-up of the euro area mounted in 2012, ECB President Draghi stated on July 26, 2012 that "the ECB is ready to do whatever it takes to preserve the euro" and followed up by announcing its Outright Monetary Transactions (OMT) program.

47. In the first half of 2011, still in the midst of the euro area crisis, the ECB had decided to raise policy interest rates on the grounds that the broader euro area outlook justified some tightening of conditions. However, from 2013, the ECB took a further set of accommodative steps to try to revive growth and meet inflation goals. In July 2013, the ECB used forward guidance, stating that it expected policy interest rates "to remain at present or lower levels for an extended period of time." It introduced negative interest rates on its deposit facility in June 2014, as well as targeted LTROs "to ease private sector credit conditions and stimulate bank lending to the real economy." In September 2014, the ECB launched its Asset Purchase Program (APP) under which it has since purchased assets that bring the size of its QE program to nearly 25 percent of euro area GDP. In March 2016, the ECB introduced a second round of Long-Term Refinancing Operations (LTRO-II).

48. The euro area's fiscal policy stance also exhibited distinct phases during the past decade. At the onset of the crisis significant stimulus was injected; the Fund's estimate of the general government structural primary balance for the AEs in the euro area moved from a small surplus in 2007 to a deficit of 2½ percent in 2009 and 2010, with the so-called "core" members providing the lion's share of the stimulus given their relatively strong starting points.[8] Fiscal policies then turned sharply contractionary, including in response to the 2011 reforms to the Stability and Growth Pact (SGP), which stiffened penalties for breaching euro area deficit and debt limits. As a consequence, the structural primary balance of the euro area AEs moved to a surplus of 1 percent of potential GDP by 2013, reflecting adjustments in both the core and periphery. Subsequently, the average stance of fiscal policy remained broadly neutral, even as the emphasis

[8] Indeed, a number of the "periphery" euro area countries (notably Greece, Ireland, and Spain) made sizable cuts in their primary structural fiscal deficits during this period, in the face of financial crises and sharp withdrawals of market access for their sovereign debt.

turned toward addressing structural impediments to growth, including with the introduction of the Investment Plan for Europe.

IMF monetary policy views and advice[9]

49. Two features of the euro area case mark it as different from the U.S. and U.K. cases. First, as noted earlier, in the case of the United Kingdom, the Fund staff was generally aligned to the majority view on the BoE's Monetary Policy Committee, rather than with any of the dissenters. In the euro area, the IMF was faced with a wide divergence of views on the need for monetary stimulus among member central banks and the ECB's Governing Council. In this case, the Fund generally came down on the side of those advocating greater stimulus, even though this was not the consensus view at the ECB for several years.

50. Second, and relatedly, Fund staff had more impact at the ECB than at the other central banks discussed in this paper. Both Fund staff and senior ECB officials stated in interviews that the dialogue with the Fund on both the broad stance of policies and the operational details played a significant role in influencing the ECB as it eventually moved towards unconventional monetary easing. The Fund's influence shows through in the 2014 Article IV, which praised ECB actions over the previous year and stated that they were "fully in line with staff recommendations" in the Fund's 2013 report.

51. In some respects, IMF engagement with ECB policymakers has been more extensive than with other major economy central banks. Internal staff documents provide evidence of deeper engagement, for example in staff memos in 2014 discussing how to forge a consensus among various national authorities within the euro area for a push for additional QE. The staff also appears to have engaged with the ECB substantively outside the Article IV consultations and formal staff visits, benefitting from a long-serving mission chief who was well known and respected by the authorities.[10]

52. The decade under study can be divided into three sub-periods:

- 2008–11, when staff and ECB views were similar. Notably, the Fund did not raise any questions about the ECB's two interest rate increases in 2011, which were criticized by many outside observers;

- 2012–14, when the Fund pushed the ECB for more aggressive easing and new initiatives on unconventional policies. During this period, staff were more worried than most on the ECB Governing Council about deficient demand and deflation risk, and differences

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[9] This discussion does not cover the IMF's advice on addressing the euro area debt crisis and the role of the ECB. See IEO (2016) for an evaluation of this issue.

[10] Two examples are: (i) the high-level workshop (in conjunction with RES) at the ECB on deflation risks in 2014 and (ii) a workshop on QE (with the Fed, Bank of Japan, and Bank of England) at the ECB in 2015.

between the Fund and the prevailing views at the ECB were clear despite diplomatic efforts on both sides to minimize the perceptions of conflict. During this period, staff not only pushed for a broadly expansionary policy stance but also took positions on the details of many policies, e.g., exactly what variations of QE and LTROs would be helpful to provide increased monetary support. The 2014 Article IV is especially noteworthy in this regard in its detailed comments on a range of current policies and extensive suggestions for additional policies; and

- 2015–16, when staff and ECB views were again in line, after the ECB had implemented several additional expansionary policies.

53. Starting in 2009, the Fund agreed with the wisdom of the ECB's "accommodative stance" (a 1 percent policy rate) and the need to sustain it. At the margin, the staff emphasized the possibility that more easing would be needed while the ECB emphasized the need to prepare for exit. This difference was consistent with the staff's view that deflation was a somewhat greater risk than perceived by the ECB. Internal documents reveal disagreements within the Fund staff. During the review process, RES pushed strongly for a more dovish position, criticizing the ECB for not reducing the policy rate below 1 percent. Internal documents also suggest that the Fund pushed the ECB harder in private than in public for expansionary policy, but with limited success.

54. As the euro area debt crisis took center stage in 2010, staff as well as European officials focused on the need for policies to address the crisis, but the priorities were fiscal sustainability, structural reform, banking reform, and strengthening the EU institutional framework. The Fund strongly supported the efforts to contain financial spillovers by introducing firewalls, including the SMP and OMT.[11] Neither the Fund nor the euro area authorities emphasized monetary expansion. There was agreement that unconventional policies had been helpful in addressing liquidity problems but were "also distorting market mechanisms and reducing incentives for weak banks to restructure." The Fund lauded the ECB as "an anchor of stability throughout the crisis."

55. In 2011, the Fund and ECB were broadly in agreement on the need for "gradual withdrawal of monetary stimulus" while continuing unconventional liquidity policies for some time. The Fund put considerable emphasis on rising inflation. Notably, Fund staff did not raise any questions in internal or published documents about the ECB's interest rate increases of March and June 2011. Other observers consider these actions to be a mistake and criticized them when they were taken in 2011.[12] As in the case of the Fed, the Fund continued to debate the

[11] Fund staff also stressed the importance of making OMT purchases on a *pari passu* basis with market holdings, unlike in the case of the SMP.

[12] Critics included political leaders, labor leaders, and commentators in leading newspapers including the Wall Street Journal, The Economist, and The Guardian.

merits and effectiveness of the ECB's policy actions at the weekly surveillance meetings, but the ECB's rate hikes do not appear to have generated any discussion in this forum.

56. With the economic outlook worsening over the latter part of 2011—which some observers attributed in part to the ECB's rate hikes earlier in the year—the Fund turned to the view that the ECB should not just reverse the rate hikes but move even more aggressively and introduce QE. At a surveillance meeting on January 2, 2012, European Department (EUR) staff laid out a detailed case for QE in the range of €0.5–1 trillion, which would "match similar U.S. and U.K. efforts." EUR noted that "QE should aim at broad monetary easing as opposed to interventions aimed at correcting market failures in specific markets" and that sovereign bonds should be the "main target for ECB purchases."

57. By the time of the 2012 Article IV, there was a clear divergence of views in public, with the Fund worried about high unemployment and the risk of deflation, while the ECB emphasized "somewhat elevated risks of inflation." The Fund approved of the ECB's LTRO programs but stressed that the current program may not be sufficient, and that collateral requirements would need to be liberalized to support banks in the periphery. The divergence of views continued to sharpen, with the Fund suggesting in the 2013 Article IV that the ECB consider negative interest rates, expand LTROs, and adopt other unconventional policies such as QE.[13] There was special emphasis on LTROs with lower collateral haircuts targeted at financing of small and medium-sized enterprises (SMEs). In contrast, the ECB had doubts about expansionary policies: it felt the effectiveness of the policies may be limited, they may "blunt incentives for reforms," and structural policies were more important than demand management. These policy differences reflected the staff's view that risks to growth and inflation were "tilted to the downside," whereas the euro authorities' response argued that the inflation risks were balanced.

58. From mid–2013 onwards, the ECB moved in the direction that the Fund, as well as many others, had been advocating. The ECB introduced forward guidance in July 2013, moved to negative interest rates in June 2014 and announced targeted LTROs to help the flow of credit. The Fund approved these actions, noting that they were consistent with the Fund's recommendations from previous years (the 2013 staff report had explicitly called for negative deposit rates). The Fund still asked for more easing to ward off deflationary risks—blogs penned by senior EUR staff emphasized the dangers from ultra-low inflation or "lowflation"[14]—but the official euro area response to the 2014 Article IV stated that the ECB had already "forcefully responded" to low inflation and expressed optimism that its actions would return inflation close to 2 percent. In September 2014, the ECB launched its Asset Purchase Program, and the Article IV reports in subsequent years have been marked by broad agreement between the views of the

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[13] Subsequently, in the 2016 Article IV report, the Fund worried about the effects of negative interest rates on bank profitability, while the ECB suggested reasons not to worry. An Annex to the Article IV analyzes the danger from negative rates, reflecting the analysis in a Fund working paper by Jobst and Lin (2016).

[14] See Moghadam, Teja, and Berkmen (2014).

Fund and those of the authorities. In 2017, the Fund characterized monetary policy as "appropriately accommodative" and ECB "stressed its commitment to continued monetary accommodation." In the summer of 2018, the Fund's Article IV supported the "ECB's commitment to keep policy rates at their current, extraordinarily low levels at least through next summer."

IMF advice on the policy mix[15]

59. In 2008 and 2009, staff was very supportive of the initial fiscal stimulus within the "core" members of the euro area, and even cautioned in 2009 against a premature shift toward consolidation.[16] Nonetheless, this advice was given with due regard to the constraints implied by euro area fiscal frameworks, recognizing that the fiscal response would need to be tailored to country circumstances and be placed within the context of medium-term consolidation plans supported by the SGP.

60. By 2010, staff's fiscal policy line for the euro area as a whole shifted squarely to consolidation, and remained so until 2013, despite quite significant shifts in the characterization of the recovery. For example, in 2010, although the euro area was characterized as facing "a severe crisis," staff called for a strengthening of fiscal adjustment plans; in 2011 the recovery was termed "resilient" and staff encouraged continued adjustment; and in 2012 the crisis was viewed as being in "an acute stage" but still the encouragement was for consolidation to continue. At least in part, this call seemed to reflect the fact that the zone was facing periodic and severe crises in confidence in the sovereign debt of many of its members, and (as noted above) that Fund staff felt there was more that the ECB could and should do to restore growth and deal with the breakdown in the credit channel.

61. By 2013, however, the fiscal line began to soften in response to signs that growth recovery was anemic. That year, although there was no explicit call for ease, staff emphasized that policies were highly procyclical and that "fiscal adjustment should be paced to avoid an excessive drag on growth." In 2014, staff endorsed the neutral stance of euro area policies, and in 2015 suggested the greater use of "fiscal space available within the SGP" to stimulate. And in both 2016 and 2017, a broadly neutral fiscal stance was endorsed.[17]

62. The early (at least in hindsight) shift in staff advice toward consolidation raises the obvious question about its appropriateness from a cyclical perspective. This tension seems not to have been acknowledged or explained explicitly in staff reports (as it was in in the case of the

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[15] This discussion does not cover the IMF's advice on addressing the euro area debt crisis and the role of the ECB. See IEO (2016) for an evaluation of this issue.

[16] Of course, the Fund's view was markedly different for the crisis-hit countries in the zone, which were encouraged to implement significant austerity programs.

[17] The 2015 staff report did not identify which countries had fiscal space, but the Selected Issues paper for the 2016 staff report presented simulations of fiscal stimulus and identified Austria, Belgium, Germany, and the Netherlands as the countries with room to loosen their fiscal stances.

2011 U.K. consultation), except in the references to inability of euro area periphery countries to fund deficits without overreliance on bank financing. What does seem clear is that staff teams gave considerable deference to SGP requirements and did not feel it appropriate to contradict the authorities' strong view that adherence was essential for maintaining political cohesion within the zone.

63. Overall, despite the significant shifts over the past ten years, staff's fiscal policy line for the euro area seemed to have been largely consistent with the authorities' own plans. No obvious deviations were evident from the staff reports or the Board statements by the Executive Directors representing the euro area, with perhaps one exception—the seeming call for additional fiscal stimulus in 2015 did not appear to be consistent with the authorities' own preference for an unchanged fiscal stance.

64. Moreover, as noted by Brad Setser (2016), staff's fiscal advice for the zone as a whole has at times been inconsistent with the sum of the advice given to its individual members. Notably, in 2016 the staff report for the euro area called for a relatively neutral fiscal stance in the zone as a whole in 2017. But the sum of advice given to its constituent members appeared to imply a net fiscal contraction (reflecting calls for expansion in the Netherlands and Germany—in the latter case modest—and consolidations in France, Italy, and Spain to stay, in each country individually, within EU budget rules).

65. At the same time, and as in the U.S. and U.K. cases, staff reports typically did not explicitly analyze the monetary and fiscal policy mix. Perhaps most notably, it was not clear how the procyclical withdrawal of fiscal stimulus in the period to 2012 should have figured into the ECB's policy settings, or whether it helped prompt the call for further interest rate cuts or the move to UMP. And while staff appeared to recognize the increasing impotence of the monetary transmission channel, its focus was on steps to repair balance sheets, extending asset purchases, or budget-neutral reforms to improve the growth friendliness of fiscal policies, rather than questioning the strictures of the SGP.

D. Japan

Key policy developments

66. At the start of the GFC in 2008, Japan already had considerable experience with deflationary concerns since the 1990s and had already introduced unconventional monetary policies.[18] However, although the Bank of Japan (BoJ) quickly cut policy interest rates to

[18] The BOJ had lowered interest rates significantly during the 1990s, but with limited success in resisting deflationary pressures. This led in 1999 to the announcement of a zero-interest rate policy (ZIRP), which was coupled with a form of "forward guidance" that involved a commitment to maintain rates at zero until above-zero inflation was durably established (Ito and Mishkin, 2004). After a premature tightening of policy, the BOJ again returned to its ZIRP policy in 2001 and began to introduce quantitative easing, in the form of scheduled and large-scale purchases of government bonds.

0.1 percent and took steps to provide liquidity to the banking sector, these steps did not prove enough to bring about a recovery. Dell'Ariccia, Rabanal, and Sandri (2018) characterize the monetary response between 2010 and 2012 as "relatively weak, involving forward guidance announcements … supported by limited asset purchases." In February 2012, the BoJ stated it would not raise rates and would use asset purchases until inflation was expected to reach a "1 percent goal" but only insofar as financial stability was not jeopardized.

67. The response became much stronger after the election of Prime Minister Abe in late–2012 and the launch of "Abenomics." In particular, in early 2013, the new Prime Minister announced a comprehensive economic program to revive Japan's economy and combat deflation—the three "arrows" were a more aggressive easing, fiscal stimulus, and structural reforms. The BoJ adopted a 2 percent inflation target and launched large "quantitative and qualitative easing" (QQE) programs in 2013 and 2014, generally referred to as QQE1 and QQE2. To continue to counter risks of a deflationary mindset, BoJ announced further steps in 2016, including negative interest rates on a portion of central bank reserves, a yield-curve control framework to bring long-term bond yields down close to zero, and an inflation-overshooting commitment to keep expanding the monetary base until the year-on-year rate of increase in the observed CPI exceeded 2 percent and stayed above the target in a stable manner.

68. Japan's initial fiscal stimulus in response to the GFC was large, taking the primary structural deficit (general government basis) from 2¼ percent of potential GDP in 2007 to 7 percent in 2010. The structural deficit remained close to this level during 2010–13, despite the new Abe administration's introduction of new government spending measures in 2013 (as part of its "three-arrows" strategy). The fiscal stance then turned sharply contractionary in 2014 and 2015, with the structural primary deficit dropping almost 3 percentage points of GDP in those two years, partly owing to the hike in the consumption tax from 5 percent to 8 percent in April 2014. Although the government announced in early 2015 its commitment to achieving a primary fiscal balance by FY 2020, a slowdown in growth caused the government to move to a broadly neutral fiscal stance during 2016–18, including by postponing the planned 2015 hike in the consumption tax until 2017, and then again to 2019.

IMF monetary policy views and advice

69. Among the four cases, this is the one in which the Fund staff were most consistently critical and prescriptive—far from a cheerleader role, except in the early years of Abenomics. The BoJ pushed back against the criticism, expressed in the BoJ views summarized in the Article IV reports and corroborated in interviews with former officials.

70. Over 2010–12, building on messages and analysis of unconventional monetary policies in Japan going back to the late 1990s, Fund staff advocated stronger easing measures.[19] The BoJ took some actions but lagged behind the Fund and argued that stronger actions were unnecessary. The underlying difference between the staff and the BoJ was that the latter was more optimistic that current policy would be successful in ending deflation soon.

71. Initially, the Fund was a strong supporter of Abenomics. However, by 2015, staff had become nervous about the slow progress towards the goals of Abenomics, and there was a return to the 2010–12 pattern of the staff pushing for more action and the more sanguine BoJ resisting. The Fund's position became more forceful in 2016—when the Fund advanced a broad agenda to "reload" Abenomics—and then somewhat less forceful in 2017 as the economy started doing somewhat better.

72. A couple of features of the Japanese case distinguish it from the other three. First, Fund staff often gave fairly detailed prescriptions about the easing tactics that the BoJ should use, even more so than in the case of the ECB, and closely monitored the status of staff recommendations in previous years. Starting in 2011, every Article IV had a chart summarizing the staff's recommendations in the previous year and the BoJ's subsequent actions. The BoJ adopted some recommendations and not others. Second, there appears to have been greater management involvement in the Article IV process for Japan than for the other countries. Internal documents and comments from interviewees point to a strong involvement of the First Deputy Managing Director and to "frank" debates between senior Fund and BoJ officials.[20]

73. Turning to a detailed look, in 2009, the Article IV report described interest rate cuts and other responses to the crisis as "appropriately accommodative," "well-calibrated," and "timely and effective." The staff also suggested more communication from the BoJ, including clarification of when inflation was expected to return to a desirable level. The BoJ pushed back on the grounds of uncertainty about the inflation outlook and the need to base policy on financial conditions as well as inflation. In 2010, the Fund noted that "deflation has reemerged" and suggested additional easing measures, including purchases of low-rated corporate bonds and loans collateralized by

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[19] Going back two decades, IMF Article IV missions had advocated for aggressive use of UMPs. For example, in 2000, the Article IV report stressed the need to keep ZIRP in place at a time when the BOJ was preparing to abandon it and suggested being ready with additional easing measures if needed, including QE through purchases of longer-dated government securities. In its 2003 Article IV report, staff welcomed the 2001 introduction of quantitative easing, but took the strong view that these measures were likely to be insufficient and left the economy still vulnerable to downside shocks that could trigger an even more severe deflationary spiral. They pressed, therefore, for steps to broaden the transmission channels for monetary stimulus, including by increasing the size of BOJ asset purchases, expanding the range of assets (to include equites and foreign assets), and improving the BOJ's policy communications to better affect inflation expectations.

[20] In some years, the summary of the Fund Executive Board discussion of the Article IV contains language about "a few Directors" who advocate more aggressive easing, suggesting division of opinion among the Fund's shareholders.

securitized SME loans, and communication of a commitment to maintain easing until forecasts of core inflation exceed 1 percent. The BoJ emphasized that inflation was expected to turn positive in 2010 and pushed back point-by-point on staff suggestions.

74. Over the course of 2011–12, the divergence in views widened, reflected in a sharp difference in forecasts of inflation. Staff emphasized that core inflation was negative and forecast that it would remain near zero for the next two years. In contrast, the BoJ expected that "it will likely not be too long before inflation reaches 1 percent under current policy settings." In a section called "Defeating Deflation," the Fund's 2012 Article IV advised further and "forceful" monetary easing, with a long list of policies that could be undertaken, including purchases of many types of assets.[21] The Fund also advised that the BoJ should clearly communicate its 1 percent goal and, once close to the goal, should consider raising it. In its response, the BoJ argued strongly that "the current policy stance was appropriate," stressed the "effectiveness of their communication," and again gave a point-by-point critique of Fund proposals. The Fund's Executive Board, which had generally sided with the staff, seemed more sympathetic to the BoJ on this occasion, commending BoJ's actions and giving an equivocal view of the need for further easing.

75. A few months before the 2013 Article IV consultations, Abenomics was introduced. Staff penned an approving section about BoJ policies called "A Fresh Start to End Deflation." The broad agreement on policies continued into the following year, with the Fund noting that "monetary policy is appropriately accommodative. With inflation and inflation expectations increasing, no further easing is needed at this point." By 2015, however, the Fund staff were getting worried about the effectiveness of the BoJ's policies and advised that the BoJ should "stand ready" for additional easing and should tweak communication, putting greater emphasis on the target rather than the time expected to get to the target.[22] The BoJ, however, felt that "its monetary framework is clear and working well." By 2016, the staff had become more alarmed and promoted a package of policy changes that would "upgrade" and "reload" Abenomics. There was a stress on incomes policies as an instrument for boosting inflation, including government wage increases and incentives for private wage increases.[23] The Fund also provided detailed prescriptions on how BoJ should discuss alternative measures of inflation and on publication of forecasts (e.g., include confidence bands and discuss alternative scenarios). When the BoJ adopted a negative interest rate policy in 2016—which the Fund had advocated for Japan in the past—the Fund gave an equivocal evaluation of this policy's effectiveness and risks.

[21] For Japan, more so than elsewhere, Fund staff advocated purchases of a wide range of assets, including corporate debt and equities and securitized loans.

[22] As in the case of the Fed and the ECB, the BoJ's policy actions were debated vigorously in the weekly surveillance meetings and to a more limited extent in the departmental comments on policy notes. There was significant intra-departmental disagreement in 2015 when MCM suggested that the BoJ consider dropping its 2 percent inflation target, but this idea was rejected by RES and the Asia and Pacific Department (APD).

[23] The Fund also supported regular, gradual increases in the consumption tax as a means of contributing to inflation while addressing "Japan's looming fiscal sustainability problem."

76. Despite their differences, the Fund and BoJ were united in their rejection of more radical policy proposals for Japan that had been made by some commentators. In particular, the Fund made a point of criticizing "unorthodox" policies such as a monetized fiscal expansion (including through the use of "helicopter money") or Svensson's proposal for an exchange rate peg. The BoJ agreed that "more extreme unconventional policies," such as monetizing debt, were "too risky" and "not feasible within Japan's current legal and institutional set up."

77. Toward the end of the period covered in this paper, the Fund was still advocating income policies and changes in communications policies, but its tone was less forceful, reflecting the fact that "the economy is gaining momentum." The authorities too were generally upbeat about developments, citing "strengthening growth momentum," wage pressures from tight labor markets, and the positive reaction of markets to BoJ policy. The 2017 Article IV reported on changes in monetary policy, including "yield curve control" (which the Fund said "has worked largely as intended") and a commitment to overshoot the inflation target, which the Fund had previously recommended. The staff concluded that "monetary policy had settled in to a more sustainable accommodative stance," which should be maintained.

IMF views on the policy mix

78. As in the three other cases examined, staff was very supportive of the Japanese authorities' steps to introduce sizable fiscal stimulus at the onset of the GFC, notwithstanding Japan's significantly higher debt/GDP ratio. Nonetheless, throughout the period, staff reports continued to devote considerable attention to Japan's long-term fiscal problem and the measures that would eventually be needed to put the debt ratio on a downward path. In this vein, staff welcomed the initial turn to fiscal contraction in 2014, as well as the hikes in the consumption tax that were scheduled for 2014 and 2017, amid signs that Abenomics was having a favorable effect on growth and inflation.

79. However, with signs that growth and inflation falling short of the goals of Abenomics, staff's fiscal advice began to soften its calls for fiscal consolidation in ways that were contrary to the authorities' commitments. In 2015, the staff report welcomed the authorities' continued efforts to cut the budget deficit but warned that offsetting measures might be needed in 2017 to minimize the dampening effects on growth of the scheduled consumption tax hike. By 2016, staff cautioned against further consolidation in the near term, and in 2017 staff explicitly called for stimulus and called for the authorities to delay their planned achievement of balanced primary deficit. The Fund team warned against large, discrete consumption tax hikes, urging instead for more gradual and regular increases.

80. More so than in the other three cases, staff advice was more explicitly and consistently framed with an eye to the policy mix. Often, the monetary policy prescription was framed with reference to the actual or planned fiscal impulse, and (unlike in the euro zone) there seemed to be clearer recognition that low interest rates improved public debt dynamics and created fiscal space. And while (as noted above) staff disagreed with other commentators that were pressing

for more radical extensions of UMP (including by monetizing deficits using "helicopter money"), staff analysis illustrated the increased fiscal space that could result from coordinating with structural and monetary policies and placing fiscal policies in a credible medium-term framework.

III. Assessment of the Fund's Role

81. This section assesses the Fund's role along various dimensions: (i) how useful was IMF advice? (ii) did the Fund's advice pay adequate attention to policy mix and cross-border issues? (iii) how sound was the process through which the Fund formulated its monetary policy advice? (iv) was the expertise of Fund staff on monetary policy adequately developed and applied?

Value of IMF advice

82. Fed and BoE officials described the value of IMF advice in fairly similar terms. The Article IV consultations with the Fund were regarded as a useful validation of steps taken and sometimes as a good sounding board for actions that were being considered. One official said that "the Fund was one of the few interlocutors with whom who can stress test your thinking." The Fund was not looked to as a source of new ideas on monetary policy. Over this period, Fund staff mostly reacted to steps already taken, and rarely put forward suggestions that had not already been entertained—and sometimes rejected—in internal discussions within the central banks (the idea of an overshoot of the inflation target was mentioned as one such suggestion).

83. Despite the importance they attached to these discussions, these central bank officials agreed that in the end Fund advice seldom had much impact on their policy choices. This was not regarded as surprising, given the huge disparity between the numbers of analysts at these central banks (many of them monetary policy experts with long years of experience) and on the Fund's country teams.

84. The cases of the ECB and BoJ were somewhat different. In these cases, as described above, the Fund at times was ahead of the curve because the authorities were cautious in carrying out greater monetary easing. Current and former ECB officials, in particular, credit discussions with the Fund for helping to build the case for QE at the Governing Council, and for thinking through some of the design features, so that the ECB was better equipped to act when a consensus to move forward was eventually reached. By contrast, observers in Tokyo suggested that the Fund had not had much influence on BoJ policies: when policies adjusted in a direction suggested by the Fund, it was because the BoJ had decided that more action was needed in the context of a broader initiative by a new government to change the course of economic policies.

85. The role of the Fund in the domestic debates varies across countries. In the United States, consultations with the IMF receive little attention in broader economic and political discussions. The Fund appears to have a more important public role within the United Kingdom, according to both staff and BoE officials. The Fund's evaluation of U.K. policies often gets prominent attention in the media, including on the front page of the *Financial Times*. On

occasion, the support of the IMF staff, viewed as technocrats without a political agenda, helped build acceptance of BoE positions, though this was more in the nature of an ex post validation than influencing the internal debate. Conversely, it could reinforce critiques of BoE decisions if the Fund's lack of support is seized on by Parliamentary committees when they hold hearings with MPC members.

86. Outside observers in academia, think tanks, and financial markets also described the Article IV as useful, though a few expressed concerns about whether the Fund was "rubber stamping" the decisions of central banks. Indeed, this concern was expressed mildly by some central bank officials themselves, with one official stating that "in hindsight, Fund surveillance of us could have been firmer." One example given in the previous section was the Fund's willing acceptance of 0.5 percent as the effective lower bound for the United Kingdom based on the BoE's arguments of factors specific to the U.K. economy. It is unlikely that the BoE's decision made a major difference in outcomes, but greater willingness to challenge central bank assumptions could nevertheless have been helpful. Some observers were fairly critical of the Fund's endorsement of the ECB's rate hikes in the first half of 2011, which in their view did make a material difference (for the worse) to the outlook for the euro area. In hindsight, it might have been helpful for the Fund to have taken note of the criticism that the rate hike of March 2011 had generated, rather than endorsing it and the subsequent rate hike without much comment.

Value of cross-country work and coverage of policy mix issues

87. While views on the value and influence of bilateral surveillance were mixed, there was nearly unanimous appreciation among senior central bank officials for the value of the Fund's multilateral products. Though each of these central banks has a well-staffed international division that follows global economic developments, the Fund's breadth of expertise in global and cross-country work was 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. A former official noted that while MPC members have been thoroughly briefed on U.K. developments and "their minds are made up," their views on broad issues such as the speed of global recovery or global deflation risk can sometimes be shaped by Fund analysis—the example provided was that of a 2009 World Economic Outlook (WEO) chapter showing that recovery after financial crises tends to be more muted than in other cases. A number of central bankers suggested that the Fund should expand its role in providing broad analyses of policy issues, drawing on cross-country experiences. A specific issue that the Fund might say more about is the role of central banks as lenders of last resort in dealing with failed financial institutions—an issue that central banks are wary of discussing because of political criticism.

88. While valuing the Fund's cross-country work in general, officials were less favorably inclined towards it in the discussion during the Article IV consultations of the likely spillovers generated by their policies on other countries. As noted in Schenk (2019), the Fund adopted the Integrated Surveillance Decision in 2012, which required Fund staff to discuss with country

officials during the Article IV consultations the multilateral impacts of their policies. The policy appears to have been adhered to pro forma; neither IMF mission chiefs nor central bank officials could recall that such discussion played any significant role in their consultations and some IMF mission chiefs thought this over-burdened the Article IV process. Occasionally, authors of the Spillover Reports made presentations of their work during the Article IV consultations. These do not seem to have had much of an influence on the authorities, who stressed the constraints imposed by domestic mandates on their policy choices.

89. There also seems to have been limited analysis of alternative mixes of fiscal and monetary policies, especially when fiscal policy turned to consolidation, while monetary policy was still looking for ways to provide additional support to demand. Staff reports could have paid more attention to whether less contractionary fiscal positions among the AEs would have reduced the burden on their central banks to support the recovery, moderated financial spillovers to emerging markets, and lessened the risks to financial stability that the UMPs may have engendered.

Process of formulation of Fund advice

90. While there was some evidence that could be brought to bear (e.g., the experience of the 1930s or Japan's experience since the 1990s), the Fund had to provide its initial support for UMP largely based on judgment that the policies would work. The weekly surveillance meeting appears to have provided a good forum for actively discussing the pros and cons of UMP among the Fund's senior staff and for countries teams to present and debate the early evidence on their effectiveness. Interviews with Fund staff suggest that even those skeptical about aspects of UMP felt that they had been heard and their views communicated to management through the memorandums summarizing these meetings. Given the importance of these countries to the global economic and financial outlook, the policy advice to them was also intensely debated in the review process for the *WEO* and the *Global Financial Stability Report (GFSR)*.

91. Given these multiple channels for working out differences in views, there was not much debate on the policy notes (PNs) for these countries prepared in advance of Article IV consultations (compared with that for smaller AEs, as described in Honohan (2019)). The review of comments on PN shows that, in the ECB and BoJ cases, there was a mild systematic difference between the views of RES and MCM (the latter sometimes joined by the Strategy, Policy, and Review Department, SPR), with RES's often suggesting a more dovish tone ("emphasize the risks of deflation") and MCM a more hawkish tone ("emphasize the limits on the effectiveness of unconventional policy"). In addition, as noted above, there were internal disagreements about ECB policy in 2009 and BoJ policy in 2015.

92. Outside of the weekly surveillance meetings, knowledge sharing and retention among the country teams was largely informal. IMF mission chiefs could not recall systematic attempts to share country experiences (e.g., to learn from Japan's experience with UMP since the 1990s) or to ensure cross-country consistency of advice. Even the surveillance meetings covered many

topics in the space of an hour and did not cover monetary policy topics on a regular or systematic basis. There was no Fund-wide research program to evaluate the effects of UMP on a timely basis or a center of expertise on monetary policy issues that mission chiefs could consult when needed.

93. Hence, transfer of knowledge often took place through "hallway chitchat," sporadic efforts by individual mission chiefs, or as part of departmental initiatives. For instance, in April 2010, APD organized a seminar in which Japan's past QE was compared to the Fed's actions.[24] Going forward, thought could be given to whether some more structured process of debate, knowledge transfer, retention, and learning from experience might be useful, particularly in cases where the Fund is throwing its weight behind experimental policies like UMP.

94. In this regard, one specific issue, noted in Everaert and others (2019), is that staff's assertions about the likely impacts of UMP on output and inflation have not been questioned enough when they have not panned out. For instance, the impact of UMP on inflation appears to have been much more muted, particularly in Japan, than asserted when Fund staff were pushing these policies. But there does not seem to be a systematic process for identifying such forecast errors and drawing lessons from them in a way to guide future policy advice.

Expertise and turnover of Fund staff

95. The broad knowledge of macroeconomic and financial issues that Fund staff brought to the table was considered useful in assessing the overall policy framework of the country. While recognizing that the Fund did not bring the depth of monetary policy expertise of their own staff or that of the Bank for International Settlements (BIS), Fund staff were "worthy sparring partners" in the words of one official. IMF mission chiefs for these countries reported that they had little trouble recruiting "high flyers;" one chief noted that paradox of using "top talent for cases of little traction."

96. To the extent that they had views on the matter, authorities felt that the tenure of mission chiefs and staff members of country assignments was too short. Japan and the euro area had eight and seven mission chiefs, respectively, over the ten years covered in this report. More than 50 percent of economists only did one mission for Article IV consultation for Japan and the United Kingdom. It was felt that staff members needed time to complement their broad knowledge with some depth in country issues and that it was important for mission chiefs to have the time to build relationships with officials. The salutary experience of ECB officials with a long-serving mission chief playing a significant role in influencing internal policy discussions stood out as an example that the Fund might consider best practice.

[24] APD staff attributed the ineffectiveness of Japan's past QE to the "narrow range" of QE assets and called for a more aggressive Fed-style asset purchases to end deflation.

References

Conway, Ed, 2013, "Blanchard: U.K. economic policy is 'playing with fire,'" Interview in The Real Economy, http://www.edmundconway.com/2013/04/blanchard-uk-economic-policy-is-playing-with-fire/.

Bernanke, Ben, 2013, "Transcript of Chairman Bernanke's Press Conference," June, http://www.federalreserve.gov/mediacenter/files/FO.

Blanchard, Olivier, 2013, "UK economic policy is playing with fire," interview with Sky News, April 16, http://www.edmundconway.com/2013/04/blanchard-uk-economic-policy-is-playing-with-fire/.

Dell'Ariccia, Giovanni, Pau Rabanal, and Damiano Sandri, 2018, "Unconventional monetary policies in the euro area, Japan, and the United Kingdom," *Journal of Economic Perspectives*, Vol. 32, No. 4, pp.147–175, Fall.

Draghi, Mario, 2012, Verbatim of the speech delivered at the Global Investment Conference, July, https://www.ecb.europa.eu/press/key/date/2012/html/sp120726.en.html (London, England).

Everaert, Luc, and others, 2019, "Frontier Issues in Central Banking: An Assessment of IMF Contributions," IEO Background Paper No. BP/19-01/07 (Washington: International Monetary Fund).

Group of 20 (G-20), 2010, Toronto Declaration, available at http://www.g20.utoronto.ca/2010/to-communique.html, June, Toronto.

Jobst, Andreas and Huidan Lin, 2016, "Negative Interest Rate Policy (NIRP): Implications for Monetary Transmission and Bank Profitability in the Euro Area," IMF Working Paper No. 16/172 (Washington: International Monetary Fund).

Honohan, Patrick, 2019, "Denmark, Switzerland, Sweden, and the Czech Republic," Chapter 2 in "IMF Advice on Unconventional Monetary Policies to Smaller Advanced Economies," IEO Background Paper No. BP/19-01/02 (Washington: International Monetary Fund).

Independent Evaluation Office (IEO), 2016, "The IMF and the Crisis in Greece, Ireland, and Portugal," Evaluation Report (Washington: International Monetary Fund).

International Monetary Fund (IMF), 2010, "From Recession to Recovery: How Soon and How Strong?" *World Economic Outlook* Chapter 3, April (Washington).

__________, Euro Area: Various Article IV Staff Reports, 2008–17 (Washington).

__________, Japan: Various Article IV Reports, 2008–17 (Washington).

__________, United Kingdom: Various Article IV Reports, 2008–17 (Washington).

__________, United States: Various Article IV Reports, 2008–17 (Washington).

Ito, Takatoshi and Frederic S. Mishkin, 2004, "Two Decades of Japanese Monetary Policy and the Deflation Problem," NBER Working Paper No. 10878, October.

Kuttner, Kenneth, 2018, "Outside the Box: Unconventional Monetary Policy in the Great Recession and Beyond," *Journal of Economic Perspectives* Vol. 32, No. 4, pp. 121–146, Fall.

Moghadam, Reza, Ranjit Teja, and Pelin Berkmen, 2014, "Euro-Area Deflation versus Lowflation," IMFBlog (March).

Santos, André Oliveira, and Douglas Elliott, 2012, "Estimating the Costs of Financial Regulation," IMF Staff Discussion Note, September (Washington: International Monetary Fund).

Schenk, Catherine, 2019, "IMF's Work on Encouraging International Policy Cooperation," Chapter 1 in "IMF's Work on Safeguarding the International Monetary System," IEO Background Paper No. BP/19-01/07 (Washington: International Monetary Fund).

Setser, Brad, 2016, "Why is the IMF Pushing Fiscal Consolidation in the Eurozone in 2017," Council on Foreign Relations blog post, August.