IEO
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BACKGROUND PAPER

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IMF Advice on Unconventional Monetary Policies to Selected Emerging Markets

Brazil and Mexico:

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ABBREVIATIONS

AE	advanced economy
AREAER	Annual Report on Exchange Arrangements and Exchange Restrictions
BIS	Bank for International Settlements
BCB	Central Bank of Brazil
BRSA	Banking Regulation and Supervision Authority (Turkey)
GFC	Global Financial Crisis
CBRT	Central Bank of Republic of Turkey
CFM	capital flow management measure
CPI	consumer price index
EMBI	Emerging Market Bond Index
EM	emerging market
FCL	Flexible Credit Line
Fed	U.S. Federal Reserve
FX	foreign exchange
FSAP	Financial Sector Assessment Program
IOF	*Imposto Sobre Operações Financeiras,* a form of tax on foreign financial investments
IV	Institutional View (on Capital Flows)
LTV	loan-to-value
PEMEX	Petróleos Mexicanos, a Mexican state-owned petroleum company
ROM	reserve options mechanism
SAR	South African Rand
SARB	South African Reserve Bank
TRY	Turkish Lira
UMP	unconventional monetary policies
WEO	*World Economic Outlook*
WHD	Western Hemisphere Department

EXECUTIVE SUMMARY

This paper assesses the help provided by the IMF to selected emerging markets—Brazil, Mexico, South Africa, and Turkey—on dealing with the spillovers from the unconventional monetary policies in the major advanced economies through its bilateral surveillance and multilateral initiatives to support international policy cooperation.

IMF advice: Staff advice to the four countries was eclectic, reflecting both country circumstances and the authorities' preferences. Specifically, Fund staff were supportive of Brazil's active use of capital flow management measures, while respecting the desires of the other three countries to refrain from extensive use of these measures. Staff views were generally in alignment with those of the authorities, with the exception that the heterodox monetary policy framework in place in Turkey from 2010 to mid-2018 was viewed by Fund staff as not very effective. The Fund also helped through its multilateral efforts, notably through the launch of the Spillover Reports to analyze the cross-border impacts of unconventional monetary policies (as well as other policies and developments) and the Flexible Credit Line to help countries better cope with spillovers.

Assessment: Authorities in all countries considered the Fund a trusted and valued advisor, though sometimes still overly influenced by orthodox policy prescriptions. The quality of IMF advice was appreciated but it was felt that there was room for increased value added. Article IV consultations were perceived as useful but lacking depth on operational monetary policy issues and sometimes still overly reflecting an "advanced economy lens." The Turkish authorities in particular felt they could have benefited from greater support and practical advice on the operational aspects of their heterodox monetary policy framework. The value of the Fund's cross-country work was stressed, particularly by the South African authorities, with several officials expressing the desire for the Fund to find more avenues to foster sharing of cross-country experiences. The Fund's multifaceted response to help emerging markets deal with the adoption of unconventional monetary policies was appreciated, particularly by Brazilian officials. The Fund's increased openness to capital flow management measures evoked a mixed reaction, with Brazilian authorities positive but Mexican authorities worrying that it could be seen as an open blessing of capital controls. Mexican officials credited Fund staff for the launch of the Flexible Credit Line, which they felt was helpful in stabilizing their external sector both through its signaling value and the magnitude of the funds it made available. The Spillover Reports were considered a useful endeavor but one that had fallen short in delivering practical policy advice; some authorities felt the effort needed to be revived given the Fund's comparative advantage in working on spillover issues. The South African authorities welcomed the recent broadening of the forms of engagement, but they expressed concerns about the high turnover of IMF staff, which limited the Fund's influence.

Chapter 1—Brazil and Mexico

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I. INTRODUCTION

1. This chapter evaluates the advice provided by the IMF staff to Brazilian and Mexican authorities on policies to manage the impact of unconventional monetary policies (UMP) in advanced economies (AE). UMP has posed policy challenges for both economies, as noted by Carstens (2015), Mantega (2010), Tombini (2013), and other senior policymakers. While recognizing that UMP—to the extent that it was successful in stimulating domestic growth in AEs—could result in stronger demand for Brazilian and Mexican exports, these observers noted that other spillover channels could generate negative impacts and other policy challenges for these countries.

2. A major concern related to cross-border capital flows that tended to appreciate local currencies. For example, central bank purchases of domestic long-term bonds in countries implementing UMP could increase interest rate differentials with foreign bonds and result in a portfolio rebalancing that depreciated the currency of the implementing country, such as the U.S. dollar. This could cause the exchange rate of partner countries—such as emerging markets—to become overvalued and adversely impact export sectors. Low interest rates in AEs could also result in increased risk appetite for emerging market assets, and large cross-border capital flows. Such large inflows complicated the achievement of monetary policy objectives and could create future vulnerabilities that would be exposed when capital flows reversed direction. Abundant international liquidity could pose financial stability risks for emerging markets stemming from credit booms and asset price volatility or bubbles.

3. Exit from UMP, as monetary policy is eventually normalized, also raises risks of financial volatility, especially for countries that have received large capital inflows. The normalization of monetary policy now underway in the United States, for example, has heightened risks of sudden reversals of capital flows. These could in turn generate disorderly market conditions in foreign exchange and other financial markets and expose currency mismatches in the balance sheets of corporates or financial institutions. The "taper tantrum" in 2013, when the U.S. Federal Reserve (Fed) started to explicitly discuss an eventual exit from UMP, and recent stresses as the Fed has continued to tighten monetary policy, illustrate the risks associated with exit.

4. This chapter evaluates how the IMF advised Brazil and Mexico to deal with such spillover effects both during the UMP implementation phase and the subsequent normalization. The next section discusses the main channels through which UMP in AEs affected Brazil and Mexico and describes the policy measures that Brazil and Mexico implemented in response to UMP. Section III summarizes the advice provided by IMF staff. Section IV provides an assessment of IMF advice based on interviews with the authorities in both countries and other experts, and a review of relevant Fund documents.

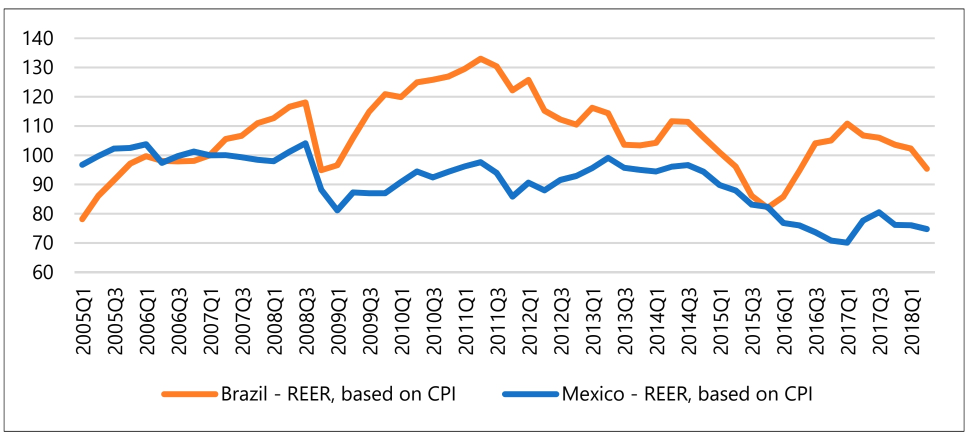
II. Economic Developments and Policy Responses

A. Economic Developments

5. UMP in AEs affected real exchange rates, capital flows, and credit growth in Brazil and Mexico, although the extent and perceptions of the impact varied between the two countries.

6. **Real exchange rate:** During the initial phase of UMP, Brazilian authorities were concerned that the manufacturing sector was struggling under an exchange rate appreciation that had triggered an import surge (IMF, 2012a). Famously, Brazil's Finance Minister Guido Mantega accused central banks in major economies of engaging in "currency wars" (Wheatley and Garnham, 2010).[1] In contrast, Mexican authorities felt that its economy benefited from weakness in the U.S. dollar relative to other major currencies, owing to the magnitude of Mexican firms participating in cross-border supply chains with U.S. firms (IMF, 2011a). For example, when the U.S. dollar weakens relative to the euro this helps to expand U.S. car exports to the euro area, which increases the production of firms that operate in Mexico in the car manufacturing sector. In Mexico, the foreign value-added share of exports reached 33 percent in 2008, compared with just 12 percent in Brazil.[2] Figure 1 presents the evolution of the real exchange rate in Brazil and Mexico.

Figure 1. Real Effective Exchange Rates
(2007 Q1=100)



Source: IMF, *International Financial Statistics* (2018).

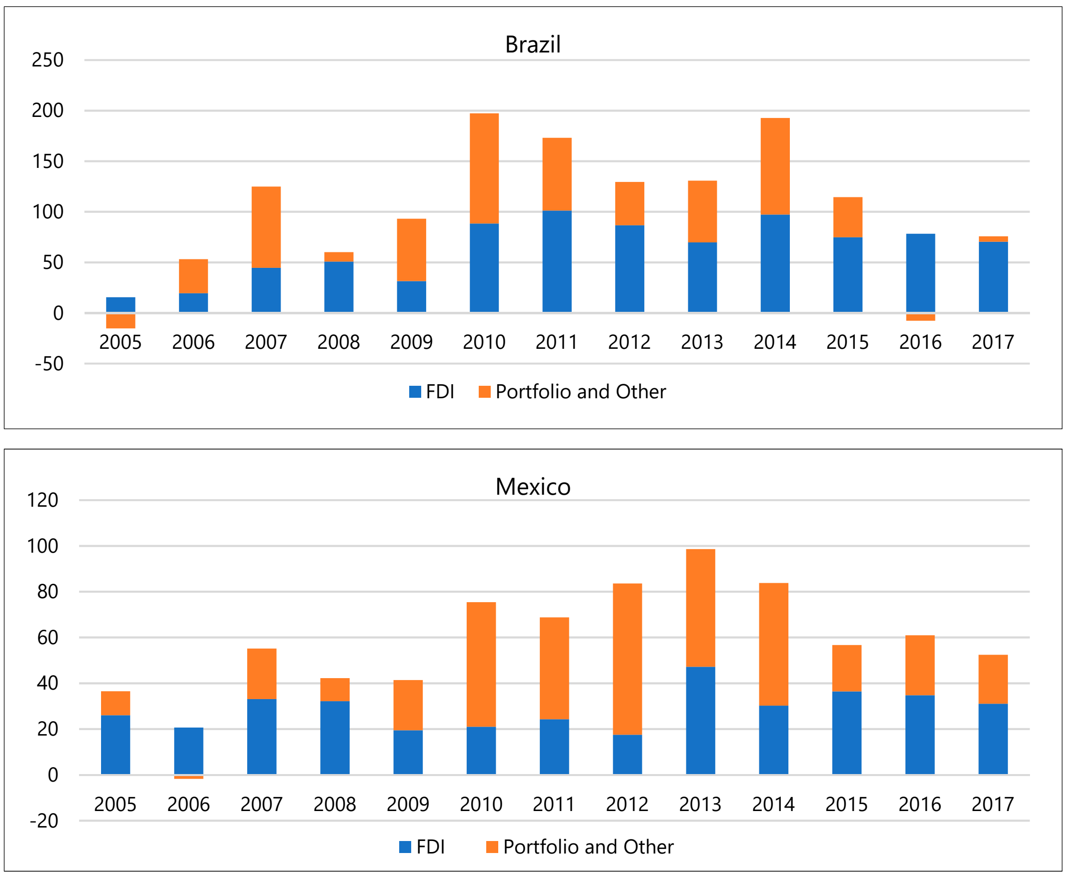
7. **Capital flows:** Large and volatile capital flows were a cause for concern for both countries. In Brazil, significant capital inflows had started as early as 2004, with the largest component being

[1] This point was further elaborated in the IMFC Statement by Mr. Mantega in the 2010 Annual Meetings (Mantega, 2010).

[2] The ratio corresponds to the "Foreign value added share of gross exports" in the OECD-WTO's Trade in Value Added (TiVA) database. See https://stats.oecd.org/Index.aspx?DataSetCode=TIVA_2016_C1.

portfolio inflows to the stock market (Figure 2). In Mexico, capital inflows were focused on long-term, peso-denominated government bonds.[3] Capital flows were volatile and went through two episodes of significant spikes in risk aversion to emerging markets: in 2009 in the context of the GFC and in 2013 during the "taper tantrum." The latter was clearly associated with Fed monetary policy communication. More recently, foreign investors again started retreating from emerging economies (including Brazil and Mexico), reflecting in part steps towards normalization of U.S. monetary policy. Both inflows and outflows of financial capital—when sudden and large—create challenges for exchange rate policy and liquidity management.

Figure 2. Non-Resident Capital Inflows
(In USD billions)



Source: IMF, *International Financial Statistics* (2018).

8. **Credit growth:** Abundant international liquidity also spilled over to emerging market economies through cross-border interbank loans, which raised concerns among some emerging market policymakers. In Brazil, the central bank viewed the fast pace of domestic credit growth as a consequence—at least in part—of the rapid growth of international borrowing by Brazilian

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[3] Mexican authorities, however, thought that IMF staff overstated the significance of these large holdings, as they perceived their domestic financial markets as quite robust.

banks. Indeed, with domestic credit growing at annual rates of over 20 percent by late 2010–early 2011, international borrowing accounted for close to one-third of the expansion in bank funding. In Mexico, by contrast, credit growth was more moderate, averaging about 6 percent per year in real terms since 2008, until the financial reforms of 2014 addressed some of the impediments to the extension of credit to the private sector and allowed a somewhat faster growth in private credit (IMF, 2015a; Box 6). Credit to the nonfinancial private sector still remains low in Mexico at about 40 percent of GDP.

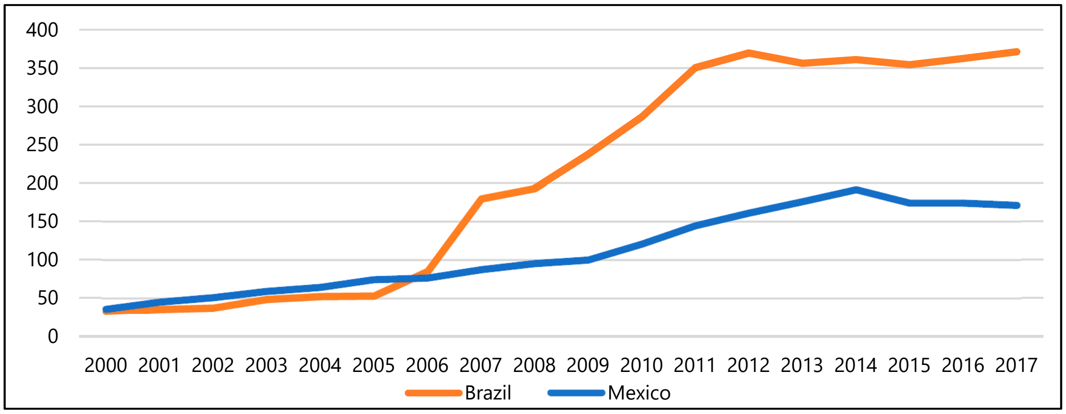
B. Policy Responses

9. These developments prompted vigorous policy responses from the authorities in both countries, utilizing multiple instruments: foreign exchange market intervention, capital flow management measures (CFMs), monetary policy (interest rate decisions), and macroprudential policies.

10. **Foreign exchange market intervention:** Until fairly recently, there was a marked contrast in the intervention policies of the two countries. While Mexico preferred to let the exchange rate follow the direction determined by market forces and largely confined intervention to application of pre-announced rules (until 2016), Brazil used both spot and forward intervention to combat large real exchange rate misalignments. As Brazil showed a preference for spot purchases and forward sales, and in the context of strong terms of trade and mostly low international risk aversion, it accumulated a large amount of reserves from 2007 through 2012. Mexico also ended up gaining substantial international reserves on a more gradual trajectory, thanks largely to sustained sales of foreign exchange earned by Petróleos Mexicanos (PEMEX) on oil exports to the central bank (Figure 3). In addition, since 2009, Mexico strengthened its external buffer by obtaining approval for a flexible credit line (FCL) from the IMF.

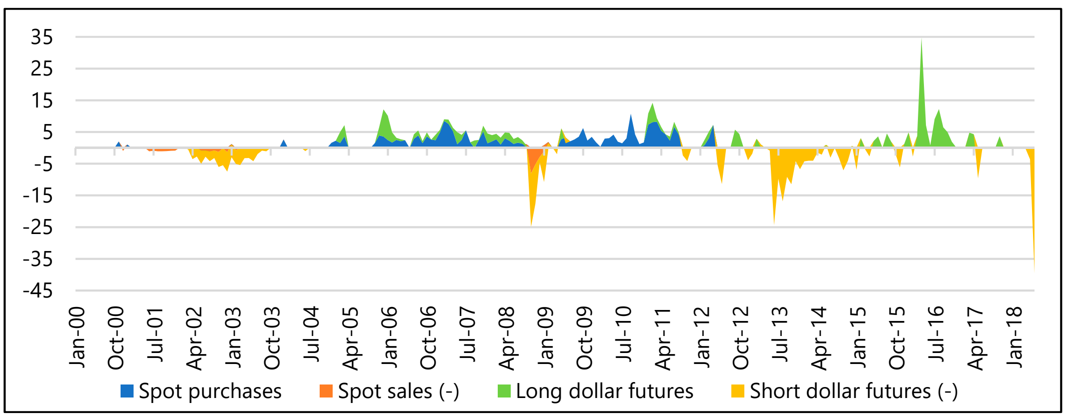
11. Heavy foreign exchange intervention in Brazil included both spot intervention and forward intervention through non-deliverable futures settled in domestic currency. The authorities believed that Brazil needed to build up a large reserve buffer to guarantee stability in the foreign exchange and financial markets. While Brazil intervened largely in the spot market as it was accumulating international reserves through 2012, it preferred to use derivative instruments to intervene when the pressure was on the side of depreciation of the real, especially since the "taper tantrum" of May 2013. By end-2014, the Central Bank of Brazil (BCB) had built a short-dollar position equivalent to $110 billion. The authorities felt this modality could be effective to relieve exchange rate pressures while still preserving the levels of spot reserves, as long as there was market confidence in the maintenance of the convertibility of the currency. BCB started to unwind its short-dollar swap position as market pressures eased, especially after the cabinet changes that followed the impeachment of President Rousseff in April 2016, but renewed turbulence forced a reversal of that trend in 2018 (Figure 4).

Figure 3. International Reserves
(In USD billions)



Source: IMF, *International Financial Statistics* (2018).

Figure 4. Spot and Futures ("Brazilian Swap") Intervention
(In billions of U.S. dollars or notional equivalent)



Source: IMF (2016), updated version of figure in paragraph 14.

12. By contrast, the Mexican peso was largely freely floating at the onset of the GFC. Banxico followed a rule of auctioning back to the market half of the net dollar inflows of the public sector (mainly accruing through the oil company PEMEX). This rule was temporarily halted in August 2008 when the peso started to come under pressure.[4] Soon after, Banxico reinstated a rule that had been operational during 1997–2001, which effectively served as a "speed limit" of 2 percent for the daily depreciation of the Mexican peso (Chamon and others, 2019).

[4] In October 2008 markets were shaken by the discovery of large losses in complex foreign exchange derivatives of several Mexican corporations with little or no exposure to the exchange rate in their commercial operations. This triggered some extraordinary foreign exchange auctions by Banxico, including $6 billion on one day and some $15 billion in a few days around mid-October (IMF, 2009). A few Brazilian corporations also suffered large losses on similar instruments, but the situation did not have a market impact of similar magnitude.

13. In addition, Mexico obtained a $30 billion swap line with the Fed in October 2008, and a $47 billion FCL arrangement with the IMF in April 2009 (IMF, 2010a).[5] The swap line expired in February 2010 and Mexico drew on it only once, for $3.2 billion in April 2009.[6] The FCL arrangement was never activated but it was renewed seven times and access was enlarged to a maximum of about $86 billion in May 2016. The rationale for the successive renewals of the FCL arrangement was increasingly linked by the Mexican authorities to the normalization of U.S. monetary policy, along with other factors like uncertainty about the future of regional trade agreements. In the November 2018 review of the FCL, access was reduced to about $74 billion at the request of the Mexican authorities, in view of reduced external risk, including that of an abrupt change in trade relations with the United States.

14. Until 2016, Mexico implemented various mechanisms of FX intervention—including partial auctions of PEMEX net revenues and the daily "speed limit" policy. By2016, Banxico judged the market had become more liquid and peso interest rates had reached a high enough level. At the same time, algorithmic trading had become more widespread, which created a perverse effect increasing buying pressure when the intervention rule was triggered.[7] At that point the rules were discontinued, and Banxico switched to discretionary intervention in case of disorderly market conditions, which arose sporadically since that time in the context of uncertainty about the future of NAFTA. In addition, in February 2017, Mexico introduced intervention using non-deliverable forwards settled in pesos, similar to Brazil's policy.

15. **Capital flow management measures (CFMs):** To restrain a surge of capital inflows as the crisis abated, in October 2009 Brazil reintroduced capital controls in the form of a tax on foreign financial investments (*Imposto Sobre Operações Financeiras,* or IOF). The IOF had been used until 2008, when it was discontinued in the face of the GFC. The IOF rate was initially set at 2 percent but was gradually increased to 6 percent and its coverage broadened as inflows remained strong and the real continued to climb as the Fed continued its expansionary policy, launching a second round of quantitative easing (QE2) in 2010. In 2011, the IOF was extended to foreign borrowing by corporations and banks with maturities shorter than one year (extended gradually to up to five years later on), and unremunerated reserve requirements of 60 percent were imposed on banks' short foreign exchange positions to discourage carry trade. Steps were taken to disincentivize firms from borrowing abroad long-term, thus avoiding the tax, and then converting the loan to a shorter maturity. In 2012, additional restrictions were put in place limiting payments to exporters before actual delivery of goods and services (Chamon and Garcia, 2016). Brazil also took a number of macroprudential measures as described below, to

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[5] BCB also benefited from a Federal Reserve swap line on the same terms.

[6] http://www.banxico.org.mx/informacion-para-la-prensa/comunicados/miscelaneos/boletines/%7B292AEBF9-0CFD-109C-6CAC-6240E5D18538%7D.pdf.

[7] In fact, the large volume of intervention prompted the Fund's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) to reclassify Mexico's system as managed float from independent float in 2015. After the change in intervention policy, the classification was reversed.

address financial stability risks resulting from fast credit growth in part associated with capital inflows.

16. By contrast, Mexico never considered the application of CFMs because concerns about capital inflows and currency appreciation were less intense and CFMs would have been a radical departure from its policy framework and risked a serious loss of credibility in financial markets. Mexico has a developed financial sector that is well integrated to international markets, and the peso is the emerging market currency most actively traded in international foreign exchange markets, and the central bank considered that CFMs were likely to be ineffective. The main regulatory measure taken by Mexican financial authorities with regards to capital movements was a modification to the VaR calculation for pension funds, useful to avoid portfolio recomposition effects due to the rise of market volatility. Although this helped offset capital inflows, the measure was motivated by prudential considerations, and the limit was not tweaked when capital flows swung widely.

17. **Monetary policy (interest rate decisions):** Both countries use an inflation targeting framework to set interest rate policy in response to domestic conditions. Despite its sizable spot intervention in foreign exchange markets until 2012, BCB felt comfortable that sterilization of the monetary impact of intervention worked well in Brazil and preserved the ability to set domestic interest rates. Moreover, the exchange rate pass-through to inflation is estimated to be quite low in both countries—5 percent in Brazil and 7 percent in Mexico—so the exchange rate should have a minor impact on expected inflation and monetary policy decisions.[8]

18. **Macroprudential policies:** The BCB was concerned that capital inflows were feeding the fast credit growth in the economy, which was in the 15 percent to 25 percent range between 2008 and 2012 and could pose risks to financial stability. This prompted BCB to use macroprudential measures as a complement to monetary policy to avoid building up excessive risks in the banking sector. The macroprudential policies included differential capital requirements and regulations on maturity and loan-to-value ratios (LTV) for certain consumer loans, including loans of longer duration (IMF, 2016). In the case of Mexico, as credit growth remained moderate, and the banking sector was sound, there was less reason to implement additional macroprudential measures. Banxico, however, took regulatory measures regarding transactions between local subsidiaries or branches and the parent banks to limit the spillovers of the financial stress affecting major Spanish banks on to their large subsidiaries in Mexico.

III. IMF ENGAGEMENT

19. While the measures adopted by Brazil and Mexico in response to UMP in major advanced economies differed significantly—especially during the first few years—IMF advice was broadly

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[8] In the case of Brazil, markets sometimes suspect a hidden exchange rate motive in monetary policy decisions. In the case of Mexico, monetary policy decisions are occasionally linked explicitly to exchange rate pressures, as noted in central bank communications.

supportive of the policies adopted by both countries. Fund staff did point out some limitations of these policies and risks that could be incurred if they were pursued excessively, but generally approved the policies as sensible responses to different country circumstances. The Fund largely reacted to, and approved of, Brazil's proactive and heterodox actions, only expressing some warnings about where measures could become ineffective or risky. For Mexico, the Fund supported the rules based monetary and exchange rate framework. The remainder of the section looks at each policy in more detail.

20. **Exchange rate issues:** In Brazil's case, IMF staff did not fully share the authorities' view of UMP as a primary cause for the exchange rate appreciation. While the Brazilian authorities attributed the real appreciation to "ultra-easy monetary policy in major currency areas," staff also pointed to domestic imbalances affecting saving and investment, favorable terms of trade developments and fast growth in unit labor costs (IMF, 2012a; 2013). In Mexico, staff seemed to agree with the authorities' view that they benefitted from weakness in the U.S. dollar relative to other major currencies.

21. Staff assessed exchange rate overvaluation in Brazil to be between 15 percent and 20 percent in 2010–14 (see Figure 3), but emphasized the large uncertainty around this estimate due to a number of Brazil-specific factors such as the difficulty of judging the "medium-term impact on Brazil's exports of the ongoing development of offshore oil fields" (IMF, 2011b).[9] Still, staff at BCB stated that they did make use of the IMF analysis along with other internal calculations in assessing the real exchange rate. In Mexico, the authorities did not follow assessments of the real effective exchange rate very closely because they considered that the floating exchange rate regime they had been following since 1995 was conducive to macroeconomic balance in the medium to long run and did not believe that possible short-term misalignments required policy responses. Staff assessments found hardly any misalignment in Mexico (Figure 5).[10]

22. On foreign exchange intervention, Fund assessments since 2012, and especially in 2013, were that the level of reserves in Brazil was somewhat excessive as seen through the lens of reserve adequacy metrics and given the high cost of sterilization. However, senior management in the Western Hemisphere Department (WHD) advised against a significant lowering of the level of international reserves when they were consulted by BCB in 2015. They thought that the high level of international reserves underpinned the credibility of the monetary/exchange rate framework in Brazil, as long as BCB losses or contingent liabilities in forward markets were not built up excessively.

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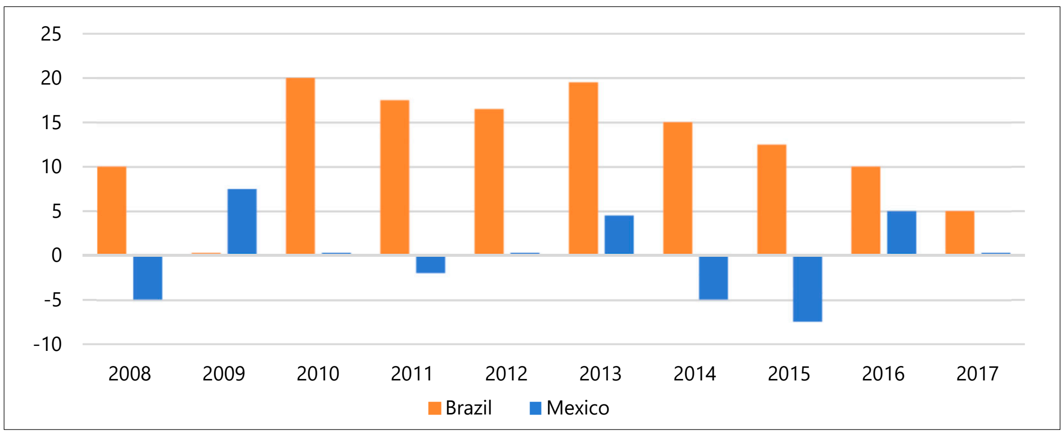
[9] IMF staff had been pointing out this uncertainty factor since at least 2009.

[10] In 2017, the results of some of the models applied by staff indicated an undervaluation of between 10 percent and 20 percent in Mexico, in the context of market pressure related to uncertainty about NAFTA, but the staff's assessment was that, by late in the year, the real effective exchange rate had returned broadly to its fundamental value (IMF, 2017).

23. Overall, Fund staff recommended that BCB be cautious in the extent of its intervention, pointing to potential losses by BCB and at times questioning whether global market conditions justified a sizable intervention instead of allowing the exchange rate to be determined by market forces (IMF, 2015b). While Brazil's large-scale intervention in forward markets was somewhat unconventional, two special issues paper studies found that derivative intervention was indeed effective in affecting the spot rate, which the authorities found reassuring (IMF, 2015c; 2016). It is noteworthy that foreign exchange derivatives markets are very liquid and deep in Brazil, and in fact IMF staff studies, as well as some academic papers, have found that the exchange rate price discovery takes place in the derivatives markets.[11]

Figure 5. Exchange Rate Misalignment as Assessed by Staff
(In percent)



Sources: IMF, External Sector Reports and IEO.
Note: The measure of misalignment used in the chart indicates overvaluation as positive deviations and undervaluations as negative deviations, all in percent from staff estimates of real exchange rate equilibrium. It reflects the staff's conclusion as expressed in the Article IV Staff Report or, when such assessment was not made explicit, an average of the misalignment estimates as measured by the various models reported.

24. Fund staff welcomed the Mexican approach that relied on exchange rate flexibility and access to contingent lines like the FCL but encouraged Mexico to conserve its buffers for use during periods of disorderly market conditions. When in 2016 Banxico shifted its policy towards discretionary intervention only, Fund staff welcomed the move but, according to Mexican officials, did not provide much practical advice on the decision. Fund staff was also supportive of the introduction of forward market intervention by Banxico but brought up the Brazilian experience and the notes of caution staff had raised in that case.

25. **Capital flow issues:** Fund staff differed from the Brazilian authorities in emphasizing that capital flows responded to a broader set of causes than U.S. monetary policies, including high

[11] Garcia, Medeiros, and Santos (2014); IMF (2016).

domestic interest rates and favorable terms of trade.[12] Despite this difference in view, IMF staff was supportive of the CFMs introduced in 2009 in Brazil, in view of the magnitude of the inflows, the real appreciation of the exchange rate, and the volatility of the flows. In the international context prevailing at the time, staff considered CFMs as part of the "feasible policy response."[13] It is noteworthy that staff took this view well in advance of the adoption of the IMF's Institutional View (IV) on Capital Flows, which was agreed in November 2012 (IMF, 2012b). However, the policies enshrined in the IV were already under development within the Fund, and staff had taken a pragmatic view in different country cases. Staff expressed some doubts, however, about the effectiveness of controls in Brazil, especially in the longer run, as there could be leakages to the types of flows that were exempted. Private sector analysts contacted by various missions also expressed the view that leakages might easily develop.

26. In Mexico, staff agreed with BCB's more benign view of UMP in the United States, which recognized the benefit of lower interest rates and financial stability in the United States. Nevertheless, the IMF also shared Banxico's concerns that shocks to global risk aversion could cause capital flow volatility.[14] IMF staff discussed the possibility of CFMs with the authorities but agreed with the decision not to resort to them because they were deemed incompatible with the monetary framework that had been successful in achieving monetary and financial stability since the 1994 Tequila crisis.

27. **Monetary policy (interest rate decisions):** While Fund staff at times had some reservations about interest rate decisions in Brazil, these were not related to the impact of UMP. The reason was that monetary policy was not made in response to foreign exchange market conditions, so there was no direct connection with capital flows or UMP. In the case of Mexico, interest rate decisions became an area where Banxico and Fund staff had different views in 2016. Banxico worried about excessive depreciation of the peso resulting from various external factors and extended its monetary tightening cycle to offset any risk to price stability. Fund staff thought that inflation and inflation expectations were well anchored already and further tightening was not necessary, but Banxico thought that the uncertainty regarding trade and capital flows prospects posed a bigger risk for the economy.

28. **Macroprudential policies:** Fund staff agreed that macroprudential measures were essential to contain financial stability risks arising from rapid credit growth in Brazil. They also endorsed the view that capital inflows had become an important factor generating credit expansion, despite the continued application of policies that encouraged the expansion of public

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[12] For example, IMF (2010b), paragraph 19; IMF (2011b), paragraph 3; and especially IMF (2011c), Section B.

[13] IMF (2010b), paragraph 31. This position was essentially reaffirmed the following year after the expansion of the coverage of the IOF and the increase in its rate (IMF, 2011b).

[14] Banxico was also concerned that capital controls in other emerging economies (including implicitly Brazil) would potentially redirect inflows towards Mexico (IMF, 2011a, paragraph 15).

banks' credit and "earmarked loans" by private banks (IMF, 2011b; 2012a). Although BCB emphasized that the focus of macroprudential measures was on financial stability, IMF staff suspected that macroprudential policies also affected aggregate demand. In interviews, some Fund staff commented that they felt the team lacked the analytical tools to evaluate this issue properly (e.g., the tradeoff between interest rates and macroprudential measures). It is worth noting, however, that this approach was fairly new and there was not a wide literature to draw from.[15]

IV. ASSESSMENT

29. Policymakers in both Brazil and Mexico were intently focused on the challenges posed by the GFC and UMP and responded in a timely manner. Brazil, in particular, had many innovative ideas and policies and to some extent led the international debate on how emerging markets should respond to UMP and prevailing conditions in global financial markets. Officials said that the authorities generally did not consult with the Fund prior to adopting measures. Nevertheless, the authorities in both countries appreciated the policy dialogue and analytical work of Fund staff and made regular use of several Fund products.

How useful and timely was Fund advice on policy options to deal with the effects of UMP? Was the advice tailored to the specific characteristics and circumstances of Brazil and Mexico? Did Fund advice have any traction?

30. **Foreign exchange intervention policy.** Although Fund staff questioned at some point whether the level of international reserves in Brazil was excessive, there seems to be broad agreement among current and former Brazilian policymakers on the desirability of building a large buffer stock, as BCB did during the years of favorable global conditions. Some officials thought that Fund staff was a bit slow in recognizing the difficulties of liquidity management in the context of abundant global liquidity. This included the significant expansion in domestic debt used to sterilize the buildup of international reserves, whose cost often worried IMF staff. Ultimately, senior WHD staff recommended to BCB leadership to continue with the high reserves policy for the credibility it provided against global risk aversion, and BCB officials appreciated the balanced analysis.

31. Although Fund staff views were somewhat cautious concerning intervention in forward markets, this strategy was also widely seen as appropriate in policy circles in Brazil. Some officials recognized the contribution of IMF analytical studies on this issue, which is not widely researched. There was a sense, however, that the quality of Fund advice was stronger when it was focused on fundamental macroeconomic analysis than on short-term market developments, which were often important to intervention decisions. A similar view was expressed by some officials in Mexico who found that Fund staff advice, although sound from a general economic

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[15] BCB's own research includes, most prominently, Agénor and Pereira (2013; 2018).

perspective, did not offer much practical guidance on the implementation of foreign exchange intervention in either the spot or forward markets.

32. **FCL.** Mexican officials credited Fund staff for designing what they considered a well-structured instrument, and well suited to the circumstances of Mexico. They thought that the FCL was critical to stabilize Mexico's external sector in 2009 both through its signaling value and the magnitude of the funds it made available.

33. More recently, there has been an exchange of views between staff and the authorities on the strategy for continuing the FCL arrangement. IMF staff advised Mexico to start to phase out the FCL after its long duration, in line with the opinion of the IMF's Executive Board. However, the Mexican authorities felt that a continuation of the arrangement was justified by the large contingent risks that Mexico faced, and was fully in line with the purpose of the facility. They emphasized that the FCL had been instrumental in helping Mexico manage potential pressures arising from the normalization of U.S. monetary policy that is still in progress, and from uncertainties related to international trade agreements and the political transition in Mexico. Nevertheless, there was an agreement to gradually reduce access to the facility as conditions stabilized, which in fact occurred in November 2018.[16]

34. In Brazil, some former officials thought that Fund staff had tried to nudge Brazil towards using the FCL facility when arguing that the level of reserves was perhaps excessive, given the high cost of sterilization. The officials thought that in principle an FCL could have been useful for Brazil, but the authorities had felt unsure of the automatic availability of the resources under the facility at times of external pressure.

35. **CFMs.** Former authorities in Brazil were pleased that the Fund had shown an open mind to reassess CFMs and to develop the IV, which in effect they perceived as largely inspired by the Brazilian experience.[17] Moreover, Fund staff and the ministry of public finance jointly organized a conference in Rio de Janeiro in 2011, which served as initial outreach for the new IV policy that the Fund had just adopted.[18] It is noteworthy, however, that this view is not universally held in Brazil. More recent authorities both at the central bank and the public finance ministry do not think that CFMs were a useful policy measure when all the pros and cons are considered, and that Fund staff should have considered more carefully their appropriateness and effectiveness in a country with sophisticated financial markets like Brazil.

36. Mexican authorities were less favorably inclined towards the IV. These officials viewed the IV as a radical departure from previous IMF policies, and considered that the issue merited more

[16] See IMF (2018), paragraph 14, and its Press Release.

[17] Nogueira Batista (2014), Brazil's Executive Director at the time however, described the IV as a "partial adaptation" and suggested that a "more fundamental revision is required."

[18] See https://www.imf.org/external/np/seminars/eng/2011/rio/index.htm.

study and better outreach. The IV was perceived 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. As concerns applications in Mexico, IMF staff and officials had agreed that CFMs would jeopardize the credibility of the macroeconomic policy framework in place.

37. **Macroprudential policies:** Former BCB officials were pleased that IMF staff had agreed that macroprudential measures were necessary to manage financial stability risks but thought that BCB, and not the Fund, had been at the forefront of research and development of macroprudential measures for Brazil. Some former BCB officials thought that Fund staff could have done more to support initiatives to curb interbank international credit flows through macroprudential measures in advanced economies in forums like the G-20.

38. **Other Fund policy advice.** Some current and former officials in Brazil and Mexico also commented on other Fund policy recommendations in the context of the GFC but less directly related to UMP.

- Some officials in both countries thought the call for global fiscal expansion by the Fund in 2008 was too generalized and did not consider sufficiently the variation in fiscal space and different cyclical positions across countries. Although this recommendation was later amended and made contingent on the diverse local conditions of countries, they noted that the Brazilian government made repeated reference to the original IMF advice to justify loose fiscal policy for a number of years even when the worst of the GFC had already passed and Brazil had ended up applying a procyclical fiscal stance. They thought that Fund staff should have been more forceful in communicating the change in the Fund's policy line.

- Some Brazilian officials also expressed surprise that Fund staff initially supported the aggressive monetary policy easing started in Brazil in August 2011 (550 basis points until the "taper tantrum" hit in 2013). The move was justified by reference to the worsening European crisis but came at a time when the economy was slowing down towards potential growth and inflation was still above the target rate, and some temporary fiscal stimulus measures were about to expire. To be fair, the 2012 Article IV Report was cautious in its support and stated that "existing monetary policy settings are more than sufficiently supportive." Starting on the following year, Fund staff began to urge a tightening of monetary policy in more direct language.[19]

[19] The 2012 Article IV Report was the first one to be published. The 2011 Article IV Report, issued just before the policy easing started, also recommended adopting a stronger anti-inflation stance.

Was the technical expertise of Fund staff useful to, and relied upon by, the central bank as it took monetary policy actions to deal with the effects of UMP?

39. The Fund was regarded as having an adequate to high level of expertise by the authorities. Many officials in Brazil praised its ability to learn and evolve after the GFC, and to make an effort to understand special circumstances. For example, it was perceived that the Fund incorporated into its recommendations some of Brazil's policy innovations, such as the appropriate use of capital controls, macroprudential policies and forward markets intervention. Some Mexican officials recognized the value of the Fund's initial work on UMP because it helped understand the issues at a point when the academic and central bank research had not yet got up to speed.

40. As concerns the analytical work of the Fund and the various tools that it had developed, the feedback was generally positive.

- Many (but not all) selected issues papers produced as part of Article IV consultations were perceived of high quality and complemented or reinforced the analytical work of government economists on issues such as intervention and capital flows.[20]

- The *Spillover Reports* were considered a useful tool to motivate the discussion of international effects in international forums such as the G-20, as central banks by nature were almost exclusively concerned with domestic economic conditions. Officials in Brazil tended to view the reports as interesting but not very relevant for policymaking. Some authorities felt the effort needed to be revived given the Fund's comparative advantage in working on spillover issues.

- The *External Balance Assessment (EBA)* was regarded as a solid attempt at the difficult task of assessing the real exchange rate level, which was an important consideration in the face of unstable capital flows. Central banks in both countries have their own methods, which tend to yield results not very far removed from the IMF estimates.

- The *Reserve Adequacy Assessment (ARA)* generated somewhat contrasting reactions. Senior BCB officials regarded it as providing a very useful toolkit, as it permits comparison with other countries across various dimensions. In Banxico, it was viewed as needing more development, as it seems to have been devised with a pegged exchange rate system in mind and does not use a more complete macroeconomic model. Officials also pointed out that the Fund could make a better outreach effort on the appropriate interpretation of the results, as rating agencies and analysts tend to take adequacy results at face value.

[20] The appendix presents a brief summary of all selected issues papers dealing with UMP related issues.

Was the Fund perceived as a trusted advisor acting in the interests of Brazil and Mexico?

41. In broad terms, the Fund is perceived as a trusted advisor by the authorities in both countries. Central bank officials reported having had excellent relations with staff, with good technical exchanges and sharing of information and models and frank policy discussions. Senior Banxico officials appreciated their active communications with Fund management in analyzing policy options to deal with the GFC, especially in 2008–09, including on the revamping of the FCL facility. Interactions between IMF staff and the ministry of public finance in Brazil were less intensive and often did not involve the most senior levels at the ministry.

42. The extent of trust was demonstrated in the high-level interaction between BCB and WHD top management during the 2015 Annual Meetings on whether the level of international reserves was excessive. BCB had requested WHD's advice regarding pressures to "use" some of the reserves either to reduce the stock of local currency debt that had been issued for sterilization purposes or to invest in infrastructure and other projects. After analysis, WHD reassured BCB that the high level of reserves lent strong credibility to financial markets and, while the cost of sterilization was high, the public debt level was not a cause of concern at that point. In any event, appropriate liquidity management justified the cost. Thus, it made sense to continue to carry a high level of cash reserves and engage in forward operations to manage the exchange rate to a limited degree, as long as the magnitude of these operations was not so large that it eroded the credibility of the reserves level or the currency convertibility. The Brazilian authorities appreciated this advice.

Was the Fund viewed as fulfilling its mandate to foster global monetary cooperation?

43. Brazilian officials were concerned that the adverse spillover effects of UMP were undermining global monetary cooperation. While their initial position had been that the source countries should take macroprudential measures to stop capital outflows (such as interbank cross-border lending), this turned out to be an unrealistic objective. Hence their position gradually shifted towards (i) creating a favorable mainstream opinion at the Fund and in other forums for recipient countries to take capital flow management measures to deal with the capital inflows; (ii) asking the Fund to better monitor the possible spillover effects, including through the launch of Spillover Reports; and (iii) using the G-20 as a forum for fostering cooperation and asking the Fund to provide analytic support to the G-20's attempts in this direction.

44. Some officials felt that the Fund could have been more proactive in recognizing and responding to the challenges that UMP implied for emerging economies. While the Fund did broadly undertake the work and adapt its policy views, they felt that it could have been more appreciative of EM concerns. They expressed some disappointment with some aspects of the work, for instance with the limited policy relevance of the spillover reports or with the level of support provided by the Fund through the G-20 processes. But the broad view was that it was not realistic to expect the Fund to have achieved much more than it did, except perhaps at times of global crisis when the desire to cooperate is more intense. Authorities also felt that the Fund's

role in fostering cooperation among central banks may be limited relative to the Bank for International Settlements, where central bank presidents meet frequently to exchange views.

V. CONCLUSIONS

45. The main findings of this case study are that IMF staff were well aware of the possible challenges that UMP presented for Brazil and Mexico and these issues figured importantly in discussions with authorities in both countries. Nevertheless, by and large, Brazil and Mexico took policy measures on their own initiative to deal with the effects of UMP and staff reacted to them, mostly favorably. Authorities valued staff's flexibility and disposition to evolve and learn from experiences after the GFC. The country-specific analytic work of the Fund was generally appreciated and considered of high quality by the authorities; it was considered especially valuable early on, when central banks and academia were not yet up to speed. While multilateral products such as spillover reports, reserve adequacy metrics, and external sector reports/external balance assessments were perceived to be of good quality, they were not very influential in the policy process and were sometimes misinterpreted by analysts and rating agencies. The adoption of the IV on capital flows was viewed as appropriate and open minded by some officials (particularly in Brazil) but as hasty and lacking solid foundation by others (especially in Mexico). The authorities in most cases considered the Fund a valuable and trusted advisor but felt that in some cases its judgment was unduly influenced by orthodox policy prescriptions. Authorities viewed the Fund as having limited success in fostering international monetary cooperation, but they thought it was difficult for the Fund to have done more given the current international financial architecture. The design of the FCL and its successful deployment in Mexico represented a clear success story for IMF staff.

APPENDIX 1. BRIEF SUMMARY OF RELEVANT SELECTED ISSUES PAPERS

Brazil

2011, "Brazil's Experience Managing Capital Inflows: The Role of Capital Flow Management Measures." Conditions for introduction of CFMs were "broadly met" but casts doubt about effectiveness and mentions "collateral damage." Does not mention UMP among factors explaining large capital inflows.

2012, "Real Exchange Rate Appreciation: Can Fiscal Policy Help?" Permanent fiscal balance adjustment generates permanent changes in the real exchange rate: 1 percent of GDP generates 1.75 percent real depreciation. Composition of spending also matters: more investment, more depreciation.

2014, "Normalization of Global Monetary Conditions: The Implications for Brazil." Detailed look a taper tantrum episode in Brazil. Estimates a model that finds significant effect of 10-year U.S. Treasury bond rates on 10-year Brazilian bond rates.

2015, "Assessment of Foreign Exchange Intervention." Detailed explanation of modes of intervention since the start of floating system. Focus on derivatives intervention post tapering talk. Assessed as successful in reducing volatility. However, paper questions decision to continue the intervention program after global conditions stabilized (June 2014) and wonders if it slowed down the needed adjustment of the real.

2016, "Effectiveness of Intervention in Brazil." Analyzes effectiveness of derivatives intervention. It affects exchange rate and reduces volatility. It is as effective as spot for short BCB U.S. dollar positions but less effective than spot for long BCB U.S. dollar positions. However, it would be ineffective when there is convertibility risk.

Mexico

2012, "Mexico: A Closer Look at Global Spillover Channels." Highlights sensitivity of Mexican financial markets (foreign exchange, stock market, sovereign debt, and corporate debt) to global portfolio flows. Volatility in Mexico correlates with VIX.

2014, "Capital Flow Volatility and Investor Behavior in Mexico." Analyzes foreign and domestic mutual funds and finds evidence of herding during periods of market stress (especially among foreign funds, for domestic funds the test is inconclusive). Also finds that the share of foreign investors in sovereign bond market amplifies volatility.

2015, "Trade and Financial Spillovers to Mexico." VAR model suggests that changes in market sentiment towards EMs could be offset by a pickup in growth in the United States (shocks of about 1 standard deviation each). Rise in long-term U.S. interest rate has a negative effect on

Mexican economy, amplified by the share of foreign investors in the Mexican sovereign debt market.

2015, "The Effects of FX Intervention in Mexico." Changes in intervention rules have an exchange rate impact. The rules mainly trigger spot sales when the peso depreciates beyond a daily rate or specify unconditional daily foreign exchange sales. Small appreciations in the peso followed the announcements of the rules but these were made under conditions of depreciation pressure.

2016, "Global Conditions and Capital Flows to Emerging Markets: How Sensitive Is Mexico?" Global factors, including risk aversion and commodity prices, explain half of the variance of Mexico's capital inflows to the bond market, much higher than in other emerging markets, especially in Latin America.

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Chapter 2—South Africa

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I. Introduction

1. This chapter evaluates IMF advice to South Africa on dealing with the effects of unconventional monetary policy (UMP) in advanced economies (AE).[1] Consistent with the objectives of the evaluation, the paper examines whether the Fund's advice to South Africa, particularly to the South African Reserve Bank (SARB), was based on sound analysis and process; what advice the IMF provided to deal with spillovers from UMP; and whether the authorities found the advice useful and tailored to the circumstances of their economy.

2. The case of South Africa is of particular interest for this evaluation as it is highly integrated into the global economy and domestic financial conditions are greatly influenced by U.S. developments in particular (see IMF, 2014; Box 3). Trade links with Europe and China are also relatively strong. This makes the country, a priori, a prime candidate for strong spillover effects, which indeed has turned out to be case during the past decade. The onset of the Global Financial Crisis (GFC) resulted in a sharp reduction in capital flows. While UMP stabilized financial conditions and global demand, creating positive spillovers for South Africa, it also raised the volatility of capital flows and created difficult policy choices.

3. South Africa, like some other EMs, has also been impacted by shifts in expectations about the unwinding of UMP (Tombini, 2013; Chen and others, 2016). When the U.S. Federal Reserve (Fed) signaled in 2013 its intention to taper the pace of its asset purchases, some emerging markets experienced sharp capital outflows and significant market volatilities. South Africa was among the countries most affected by this "taper tantrum" and it thus provides a good test case of the quality of IMF advice in preparing countries for managing exit risks.

II. Economic Development and Policy Responses

4. South Africa's macroeconomic performance was relatively solid prior to the GFC (Figure 1). The economy experienced average growth of about 5 percent between 2005 and 2007, reflecting both good macroeconomic management and generally favorable external conditions. Inflation was reduced to mid-single digits,[2] the external reserves position improved, and unemployment retreated to below 23 percent. Conservative fiscal policy generated a healthy

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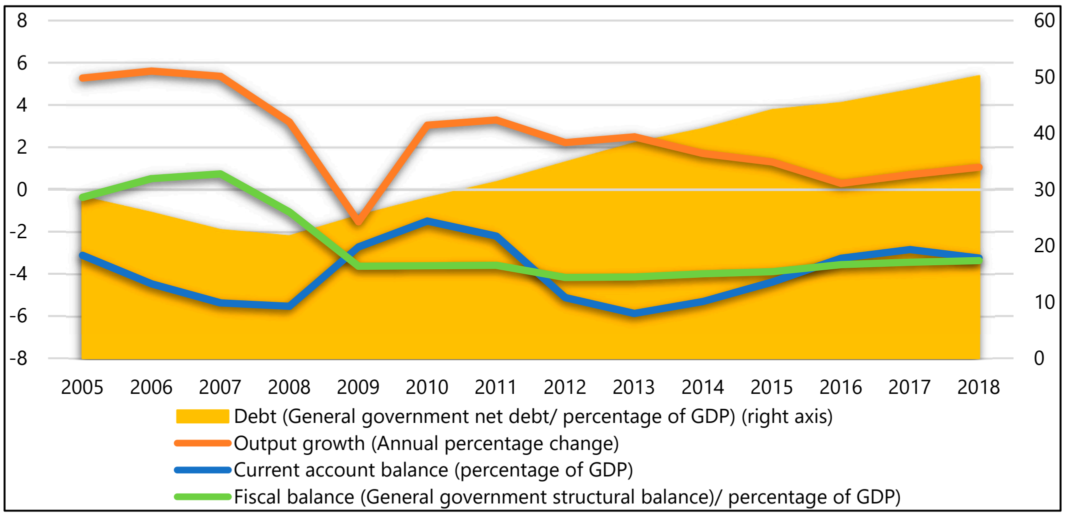
[1] This paper is based on the review of staff reports and other staff documents and discussions with mission chiefs and with the authorities during a trip to Pretoria in April 2018 that included meetings with senior officials including the governor and deputy governor of the South African Reserve Bank.

[2] Within its flexible inflation targeting framework, introduced in 2000, the primary objective of monetary policy is to achieve maintain price stability in the interests of sustainable and balanced economic development and growth. The SARB has full operational autonomy, with policies set by its Monetary Policy Committee. The policy framework permits deviation of actual inflation away from the target range due to first-round effects of supply shocks. SARB however determines the appropriate time horizon for restoring inflation to within the target range. This flexibility implies that SARB is responsible for returning inflation to within the target range but allows for interest rate smoothing over the cycle, which may mitigate any output variability from the monetary policy response to shocks.

fiscal position with relatively low debt levels, which allowed the authorities space to loosen fiscal policy in response to the economic downturn. The Financial Sector Assessment Program (FSAP) update of 2008 indicated that South Africa's financial system was generally sound, supported by well-engrained legal and financial infrastructure and effective regulatory framework. The FSAP found the banking system to be well capitalized with adequate levels of profitability and reserves.

Figure 1. South Africa's Macroeconomic Fundamentals



Source: *World Economic Outlook*, 2018.

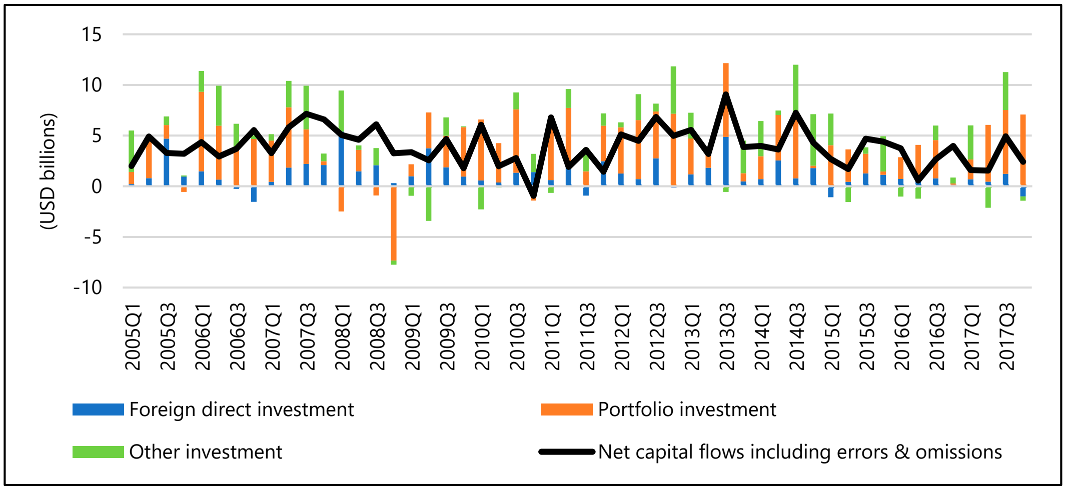
5. The South African economy was afflicted by a series of shocks from the beginning of 2008. Growth was dampened by a sharp contraction in external demand and a slump in commodity prices, along with power cuts that disrupted output and exports (particularly in mining). The global financial market turmoil in early 2008 further compounded these challenges (IMF, 2008; 2009).

6. One source of vulnerability at the onset of GFC was the large and widening current account deficit, which was largely financed by portfolio flows. Capital flows to South Africa became more volatile during the GFC and following implementation of UMP by AEs (Figure 2). The ebb and flow of external financing during the GFC and the subsequent use of UMP meant that South Africa was highly exposed to global market sentiments. High external financing needs created a direct relationship between UMP in advanced economies and domestic policy choices.

7. Given the tight link to U.S. financial conditions, the impact of the GFC and UMP was reflected in a whipsawing of capital flows, the exchange rate, and bond yields. The onset of the GFC resulted in a sharp reduction in capital inflows in 2008–09, which was then reversed following the implementation of UMP. The prospect of normalization of U.S. monetary policy again led to a dampening of net inflows. Since South Africa adhered to a relatively flexible

exchange rate over this period, external flows was reflected in increased exchange rate volatility[3] (Figure 3).

Figure 2. Non-Resident Capital Flows



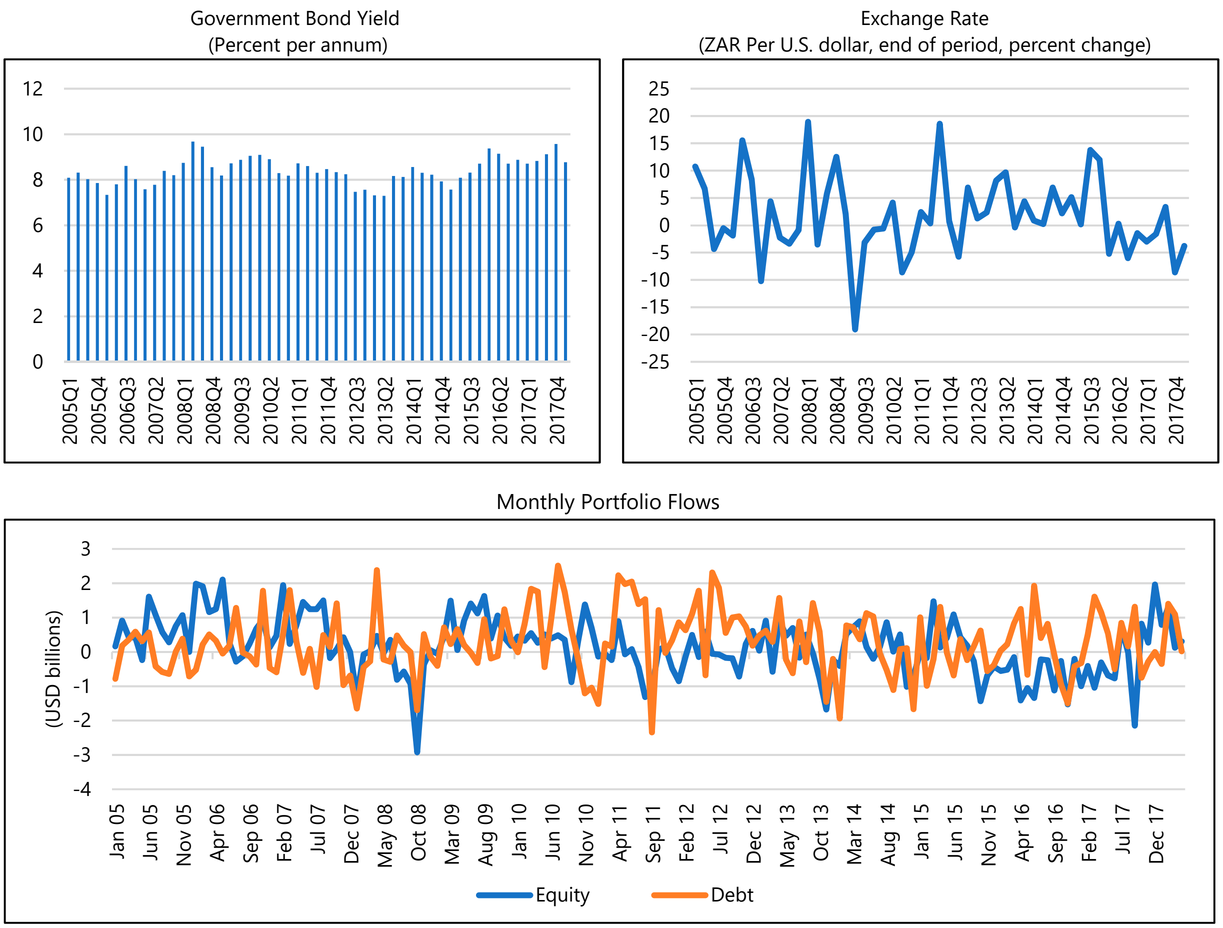
Source: Institute of International Finance (2018).

8. In 2010, South Africa attracted increased inflows, reflecting the positive interest rate differential, easy global monetary conditions due to UMP in AEs, relatively favorable fiscal position, and confidence in the economy as evidenced by high-profile foreign direct investment inflows (Marcus, 2011). While the surge resulted in an overvaluation of the rand (ZAR), the available options to counter this involved significant costs and trade-offs: direct intervention was expensive, and the authorities were not inclined to use capital flow management (CFM), reflecting doubts about the efficacy of capital controls related to South Africa's open capital markets and commitment to foreign investment. The central bank opted to step up foreign exchange intervention in 2010 to build reserves. However, the degree of reserve buildup was moderate compared to other EMs (Figure 4).[4]

[3] Staff assessment of the exchange rate using the current account balance indicated that the rand was overvalued by an average of about 10–20 percent between 2008 and 2013, by 5–20 percent in 2014, and by 0–10 percent in 2015. The rand was estimated to be undervalued by 0–10 percent in 2017.

[4] This was foreshadowed by the central bank governor, who indicated that under exceptional circumstances, the central bank would act by purchasing foreign direct investment-related inflows, and with the central bank's stated policy of building reserves (Marcus, 2010).

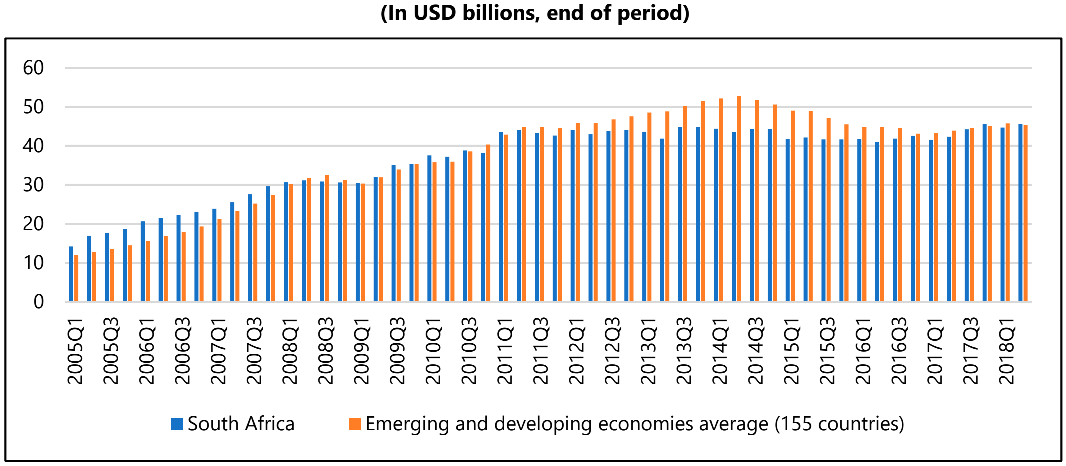
Figure 3. Bond Yield, Exchange Rate Index, Portfolio Flows



Sources: St. Louis Fed (FRED), 2018; IMF, *International Financial Statistics* (2018); and Institute of International Finance (2018).

Figure 4. South Africa versus Emerging Markets and Low-income Countries: Official Reserve Assets

(In USD billions, end of period)



Source: IMF, *International Financial Statistics* (2018).

9. By end-2011, however, the ZAR had appreciated significantly, adversely affecting competitiveness of the export sector. At the same time, the central bank was concerned about the possibility of inflation increasing due to the impact of food and oil price shocks. The central bank opted to delay commencement of the tightening cycle until the appearance of a more pronounced increase in core inflation or inflation expectations, given existing economic slack and the strength of the rand, which helped moderate inflationary pressures.[5]

10. After the "taper tantrum" in 2013, the authorities faced the task of managing the challenges associated with the unwinding of UMP in AEs.[6] The uncertainty regarding the timing and pace of Fed tightening provided a further source of stress in a policymaking environment already complicated by mining strikes, electricity constraints, and a decline in commodity prices, along with a worsening fiscal position. While UMP normalization suggested a need to tighten policy to protect the external position, raising rates risked further weakening the slow recovery. Moreover, the reversal in capital flows had resulted in a marked depreciation of the rand.

III. IMF ENGAGEMENT

Spillovers

11. The challenges of dealing with the spillovers from the GFC featured prominently during 2008 and 2009 Article IV consultations. Staff highlighted the increased risk premia on South African debt, weakening of the stock market index, and a marked depreciation of the rand associated with the decline in capital flows. Staff noted that the GFC had heightened investors' sensitivity to South Africa–specific risk, reflecting concerns about the power crisis, the rising current account deficit, and the impending political transition.

12. Spillover effects from UMP in the major advanced economies were not specifically mentioned until the 2011 Article IV Staff Report, which noted that these policies had contributed to a surge in capital inflows in emerging markets. The 2012 report highlighted the benefits to South Africa from the abundant flow of global liquidity, with strong inflows into the local currency bond market driven by yield differentials.

13. From 2013, attention shifted back to South Africa's vulnerability to spillovers from tightening global financial conditions given the significant financing needs and the large share of bond and equities held by foreign investors. Overall, the negative spillovers associated with the onset of the GFC and the possible unwinding of UMP were given greater emphasis than the positive spillovers due to the implementation of UMP. The 2013 and 2014 staff reports presented in some detail the potential risks to South Africa of capital flow reversals.

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[5] See Marcus (2011) for the central bank analysis of the challenges and options.

[6] Mminele (2014) discusses the challenges of domestic policymaking in this uncertain environment.

Exchange rate flexibility, reserve accumulation, and CFM

14. The Fund consistently supported the flexible exchange rate regime as an important shock absorber including to help with volatile capital flows. In 2008, staff agreed with the authorities that the exchange rate should be allowed to adjust flexibly, including in the event of an adverse shock. In the 2009 report, following sharp depreciation in late 2008 because of capital outflows and subsequent appreciation due to a surge in inflows that coincided with the implementation of UMP, the Fund reiterated its support of the flexible exchange rate regime. In 2013 and 2014, staff credited SARB's policy of exchange rate flexibility with helping South Africa adjust to capital flow volatility, noting that in the event of outflows, exchange rate depreciation should be the critical adjustment mechanism. Staff recognized that this implied greater exchange rate volatility given the ebb and flow of capital but argued that exchange rate flexibility likely moderated inflows by discouraging carry trades.

15. While supporting the flexible exchange rate system, the Fund consistently urged the authorities to increase the level of international reserves. South Africa's reserves were below the optimal level based on the IMF's reserve adequacy metrics and the levels held by most EMs. In 2008, staff supported the authority's decision to strengthen reserve holdings, observing that a larger reserve cushion would mitigate the risks from the widening current account. In 2009, staff welcomed the gradual buildup of international reserves since the late 1990s. However, staff indicated that reserves remained below the traditional benchmarks of reserve adequacy and supported the SARB's policy of gradually building reserves through market purchases without seeking to influence the exchange rate.

16. In 2011, staff welcomed the significant increase in reserve accumulation but highlighted the moderate degree of intervention relative to comparable countries, noting that reserves remained at the lower end of alternative measures of adequacy metrics. In 2012, the Fund recommended further buildup of reserves for precautionary purposes. While reserves were deemed adequate under traditional metrics, the IMF's risk-weighted metric for reserve adequacy indicated that additional buildup might be required over the medium term.

17. In 2013, staff noted that increased reserves would allow SARB the space to supply foreign exchange (FX) liquidity in case of disorderly market conditions and would reduce the country's risk premium, partly compensating for carry costs. Staff suggested that reserve accumulation could be achieved through preannounced small regular FX purchases that would not interfere with the floating exchange rate regime (as done by Israel, Mexico, and Turkey). Staff argued that higher reserves could help prepare against surges in market volatility. This was particularly important given the expected tightening of financial conditions in view of the imminent unwinding of UMP.

18. In 2014, the Fund again called for higher reserves to strengthen resilience. In 2016 and 2017, staff argued that during risk on episodes and in the event of large transactions, the SARB could be more opportunistic in purchasing foreign exchange. Staff noted that FX purchases

beyond required base money creation would have to be sterilized. Staff argued that the related carry trade costs could be viewed as insurance costs, which reduced the probability and impact of a negative external financing shock.

19. Staff discussed with the authorities possible macroprudential measures or CFM to influence capital flows but emphasized that sound macroeconomic policies should be the first line of defense. Staff suggested that the authorities could consider use of either an unremunerated reserve requirement or a small tax on inflows to curtail or at least change the composition of inflows. In the 2011 report, staff noted that with limited scope for modifying the monetary and fiscal settings in the near term and the rand on the strong side of fundamentals, there was a case for using CFM.[7] While identifying CFM as a possible measure, staff highlighted the potential drawbacks, including higher government financing costs and the fact that, absent wage restraint, the possible nominal rand depreciation was unlikely to enhance competitiveness. Staff cautioned that the use of CFM should complement rather than substitute for needed macroeconomic policy adjustments.

20. Staff supported the authorities' decision to continue the process of gradually liberalizing foreign exchange controls on residents, which commenced in 2009.[8] Staff argued that liberalization of limits on foreign investments of domestic nonbank institutional investors should proceed slowly to allow time to address the liquidity risk for banks that depend on domestic wholesale funding. Staff also cautioned that the pace at which controls were removed should be eased during periods of heightened uncertainty, as was the case during the taper tantrum.

Macroprudential risks

21. The IMF discussed financial sector issues at great length in Article IV reports. However, macroprudential risks in South Africa were assessed as moderate and financial sector risk associated with capital flow movements was considered limited. The 2011 Article IV staff report identified the main risks as banks' dependence on domestic short-term wholesale deposits and high household indebtedness. The report noted that a large reversal in portfolio flows was likely to have small balance sheet effects, because firms, households, and financial institutions bore little exchange rate risk. The flexible exchange rate would pass part of the adjustment cost to foreign investors holding mainly rand-denominated public debt. The 2012 staff report noted that limited dependence on external funding and low direct exposure to euro area periphery countries allowed South African banks to remain largely unaffected by the recent increase in global financial stress.

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[7] This occurred before the IMF's Institutional View was finalized, but internal discussions at the Fund were well advanced.

[8] Based on interviews with mission chiefs.

22. The 2014 FSAP stated that financial risks were elevated but manageable (see IMF, 2014). In 2016 staff conducted an analysis of macro-financial linkages and argued that extensive macro-financial linkages could amplify shocks given South Africa's high reliance on external finance, high foreign ownership of local securities, and banks' increasing role in intermediating capital flows. Sovereign rating downgrades to speculative grade could trigger capital outflows and generate negative feedback loops. The authorities appreciated staff's analysis of macro-financial linkages, though they were of the view that protracted low growth and the attendant asset quality deterioration were the most prominent risk, rather than liquidity shocks.

Monetary policy (interest rate) decisions and support from fiscal policy

23. The IMF's recommendations on monetary policy were aimed at keeping inflationary expectations anchored close to the midpoint of the target band, while providing support to the domestic economy when feasible through monetary easing.[9] Though the external environment weighed heavily on South Africa's domestic economic performance, monetary policy was considered as best directed within a conventional inflation targeting framework rather than as a tool to directly influence capital flows.

24. The advice offered by IMF staff was generally in line with the views of the monetary authorities although in some instances there were disagreements on timing. At the onset of the GFC in 2008, the IMF supported a tightening of monetary policy and effective lengthening of the policy horizon[10] as appropriate responses to the successive supply shocks from food and energy prices and suggested that further monetary policy tightening might be needed to anchor expectations and contain second-round effects.

25. In 2009 as the economy slowed, staff supported the central bank's decisive easing of monetary policy from December 2008. Staff also supported a pause in easing as justified, given intensified inflation risks and the desire to bring inflation below 6 percent by the end of 2010. In 2010, staff advice on monetary policy was geared towards keeping inflation expectations anchored. IMF advice on monetary policy from 2011 to 2017 was focused on SARB getting the correct balance between containing inflation and supporting growth. Staff urged SARB to remain ready to move quickly in either direction—a tightening (if there was an upward shift in inflation expectations) or a loosening (in response to, say, a deterioration in external conditions) (IMF, 2014). For example, in the 2014 report, staff noted that monetary policy might be able to stay accommodative for a longer period and cautioned that tapering of unconventional monetary policy in the United States created uncertainty about the neutral policy rate.

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[9] A selected issues paper by staff examined the relationship between changes in the policy rate and equity flows and concluded that an expected increase in interest rates is associated with a slight increase in capital flows, observed two and three days after the policy announcement. However, an unexpected increase in interest rate change generates a larger and negative movement in equity flows three days later.

[10] Time frame for returning inflation within the band (see footnote 2).

26. In the 2008 staff report, prepared before the GFC, the IMF advocated a tightening of fiscal policy over the medium term, but the Fund pivoted in 2009 to support an expansionary fiscal stance predicated on the weak economic outlook in line with a global call for fiscal stimulus to help stabilize demand following the onset of the GFC. The implementation of UMP in the major advanced economies allowed for relatively easy financing of the increased deficit. Staff supported the fiscal stance between 2010–12, arguing that it entailed an appropriate balance between fiscal consolidation and support for the economy, particularly through increased investment spending. However, after 2012, as growth continued to disappoint despite the supportive policy stance, and the budget deficit widened, the Fund recommended and supported the authority's proposed consolidation plans, highlighting the need to lower the financing requirement in order to reduce the risks of reduced external funding flows with the normalization of monetary policy in the major advanced economies.

IV. ASSESSMENT

27. The authorities viewed the implementation of UMP by major AEs as necessary to restore global economic stability. As South Africa stood to benefit considerably from a turnaround in the global economy, the authorities felt that on balance the gains from implementation of UMP outweighed the potential risks and side effects—such as greater volatility in capital flows—associated with such measures. South Africa therefore viewed the IMF's support of UMP in advanced economies as appropriate.

28. While supporting UMP, in the view of the South African officials IMF staff were appropriately alert to the challenges from these policies for South Africa. This was partly because the highly open nature of the economy meant that spillovers from AEs' policies had been a constant theme during Article IV consultations, even before the GFC. The Fund's advice to South Africa in managing the spillover effects of UMP was generally in line with the monetary and fiscal policy stance of the authorities. The Fund's initial recommendation to loosen monetary and fiscal policy after the GFC was consistent with the internal conclusion of the central bank and ministry of finance. The subsequent call for greater focus on fiscal consolidation in 2013 was also in keeping with the authorities' policy views, though staff expressed concerns about delays in implementing announced fiscal consolidation measures.

29. The Fund's positions on exchange rate flexibility and reserve accumulation were also broadly in line with the policy stance of the central bank, although on reserve accumulation, the rate of accumulation was lower than what the IMF recommended. This difference reflected concerns about the fiscal cost of accumulating reserves, while the authorities questioned the efficacy of holding additional reserves, arguing that the existing levels of reserves were adequate from a prudential perspective. The authorities made the point that cross-country comparisons focusing on reserves as a ratio to GDP were unfair to South Africa because the lion's share of its external liabilities are denominated in local currency. During interviews with South African officials, they reiterated their position that additional reserves were not required given their firm stance on exchange rate flexibility and that existing levels were adequate.

30. The authorities welcomed the introduction of the Flexible Credit Line (FCL) as a useful addition to the global financial architecture. The authorities had internal discussions on whether South Africa would have benefited from an FCL arrangement but decided against making a formal request due to differences among senior officials on whether it was needed. The officials were also concerned about the stigma associated with a formal Fund lending arrangement.

31. The Fund's advice on the use of CFM was broadly in line with the institutional view, focusing on macroeconomic policies and particularly exchange rate flexibility as the first line of defense in absorbing external financing shocks but suggesting that CFM should be considered as part of the toolkit. The authorities viewed the Fund's more nuanced policy on this issue as a positive development, although they viewed the imposition of CFM as inappropriate for South Africa, given the high dependence on external funding, including to finance the budget deficit. In addition, the authorities argued that implementation of CFM would be slightly inconsistent with the decision to gradually relax controls on outward investment by domestic agents. Furthermore, the authorities were not convinced of the potency of such measures because the cross-country experience suggested to them that they could be easily circumvented.

32. Overall, the IMF was seen as a trusted advisor as South Africa faced a challenging external environment. But the Fund exerted limited influence on South Africa's policy decisions; it mostly provided ex post validation of those decisions. The authorities found the opportunity for an in-depth review of their policy choices useful but observed that advice provided by the IMF was not particularly new or innovative as the authorities had arrived at similar conclusions prior to engagement with the Fund. The value added of IMF engagement on monetary policy issues was seen as coming more from discussion of the overall policy framework than from staff's technical expertise. While IMF staff's technical skills were viewed as generally more than adequate, they did not significantly augment the central bank's technical knowledge, and sometimes it was felt that Article IV missions served as a learning opportunity for IMF staff given high turnover on the team.[11] Moreover, it was felt that some of the Fund's recommendations that were derived from its analytical findings did not take into sufficient consideration the domestic political economy issues involved in implementing policy reforms.

33. The authorities had high praise for the IMF's multilateral products—the *GFSR* and the *WEO*—which provided them with valuable analysis of global developments and policy options, as well as useful information on the policies implemented by other EMs, thus providing valuable input to their decision-making process. The Fund's willingness to feature this expertise sometimes as part of the Article IV process was highly valued. Presentations by the IMF's Economic and Financial Counsellors at a seminar during one Article IV consultation received particular appreciation.

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[11] The Fund's contributions on financial sector issues, particularly relating to financial sector stress testing and modelling, provided greater scope for knowledge transfer. See, for example, Goswami, Jobst, and Long (2009).

34. Similarly, meetings organized by IMF mission chiefs that put the South African authorities in touch with other emerging market mission chiefs were highly valued, as they provided an avenue for informal information sharing on common challenges and policy options. These meetings were organized on several occasions—on the margins of the Bank-Fund meetings at the onset of the GFC and during implementation of UMP.

35. In recent years, the Fund team working on South Africa has innovated in ways to increase the value added of IMF advice and deepen relationships with the authorities. The authorities appreciated the one-day seminars organized during Article IV missions during which the Fund staff and the officials presented analytical papers. This allowed for a frank exchange of views on the analytical underpinnings of policy recommendations.[12] Over the past two years the forms of engagement have broadened further to include video conferences to discuss policy issues, provision of comments on SARB policy position papers, and sharing of analytical notes on technical issues, all of which have been welcomed by the authorities.

36. The authorities felt that the relatively short tenure of mission chiefs to South Africa and the frequent change in the composition of IMF's missions adversely affected the Fund's engagement and limited the Fund's influence. Between 2008 and 2017 the South Africa team was led by 6 different mission chiefs, backed by 5 resident representatives and 27 economists (desk and functional). Of the 27 economists, 3 participated in at least 3 Article IV missions. This contributed to a lack of in-depth country-specific knowledge. In addition, the relatively high turnover of IMF staff meant that the central bank was engaged in continuous training of the Fund's team on the intricacies of the SARB's operations and the specificities of the domestic economy.

V. CONCLUSIONS

37. Overall, the IMF was viewed over the past decade as a trusted advisor to South Africa as the country faced a variety of challenges including responding to UMP. Senior decision makers valued engagement with the IMF as a useful avenue to provide validations for policy decisions. However, the Article IV consultations were not seen as having much influence on decisions or deepening the authority's technical analysis. The multilateral surveillance products (*WEO* and *GFSR*) provided important perspectives that enhanced the information set available to the authorities.

[12] A mission chief noted as an example that the information discussed at the IMF internal surveillance meetings would have been highly beneficial to the authorities and a mechanism to provide such documents could have been established.

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Chapter 3—Turkey

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I. INTRODUCTION

1. Turkey, like the other emerging market economies covered in this paper, had to deal with increased capital flow volatility during the global financial crisis (GFC) and the subsequent implementation of aggressively accommodative monetary policies in the major advanced economies. Despite strong economic performance over 2002–06, Turkey's economy remained vulnerable to external funding shocks due to its large current account deficit. A sizable portion of Turkey's capital inflows have tended to be short term, which has made managing capital flow surges during risk-on episodes more difficult and raised the risk of sudden stops during spikes in global risk aversion.

2. In addition to turbulent global economic conditions, Turkish economic policymakers have had to adjust to a changing political scene. In the aftermath of the 2001 economic crisis in Turkey, there was a political consensus for reforms that restored fiscal balance and permitted an independent central bank to move to a fairly standard inflation targeting regime. However, in recent years there has been a shift away from such conventional policy approaches toward interest in more heterodox policy instruments in efforts to balance growth and stability objectives, a shift reinforced by efforts to address the external challenges posed by the GFC and unconventional monetary policies (UMP).[1]

3. This chapter assesses the Fund's advice to Turkey, particularly to the Central Bank of Republic of Turkey (CBRT), under these difficult economic conditions and political context. The evaluation examines whether the authorities found the advice useful and tailored to the circumstances they faced.

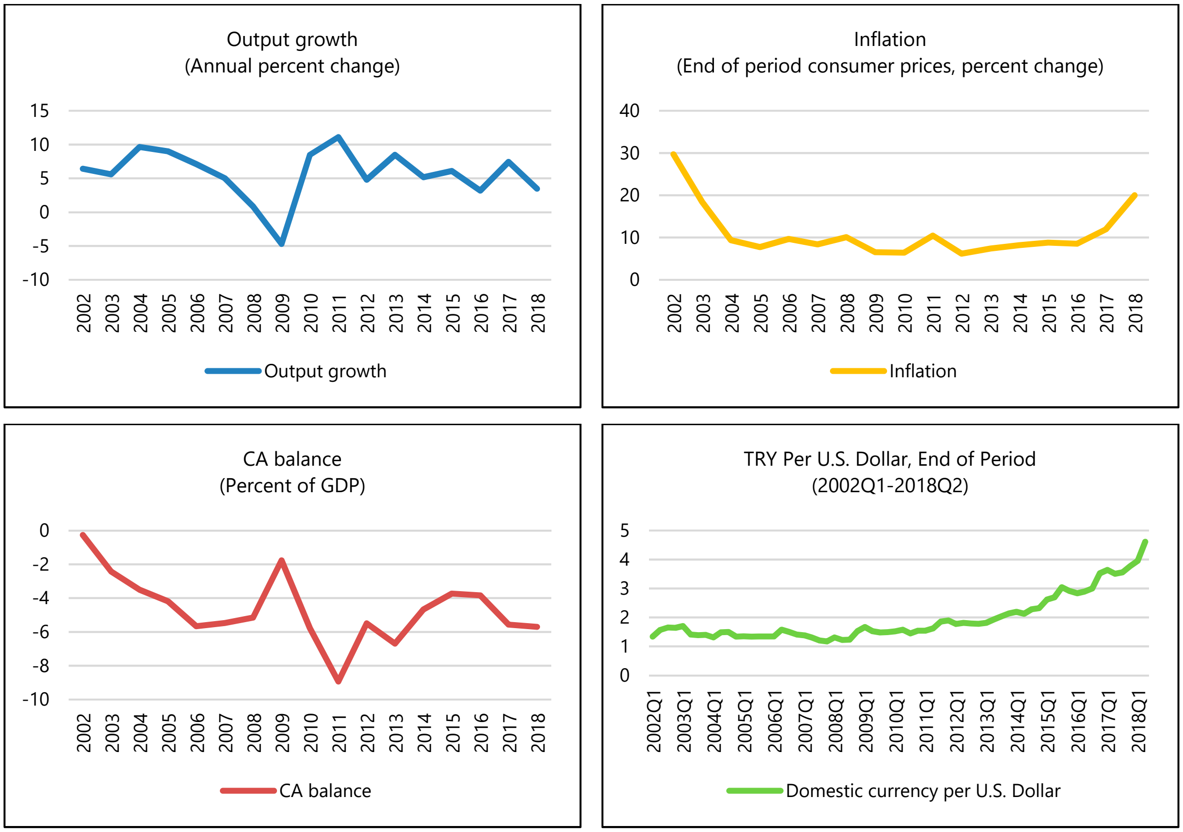
II. ECONOMIC DEVELOPMENTS AND POLICY RESPONSES

4. In Turkey, annual growth averaged above 7 percent annual growth over 2002–06, but the economy had already been slowing prior to the GFC in 2008. Fiscal outturns had been good and debt levels were relatively low. Inflation was brought down from nearly 30 percent in 2002 to 10 percent a year later. The main economic vulnerability was the large current account deficit, which was financed mainly by short-term flows, leaving Turkey highly exposed to external funding shocks.

5. At the start of the GFC, there was a very sharp downturn and significant capital outflows. The authorities acted swiftly to shore up the economy. The central bank lowered policy interest rates by 1025 basis points from November 2008 to November 2009, to 7.25 percent. Targeted fiscal stimulus measures were announced, and the banking sector was supported through the relaxation of loan classification and provisioning regulations. These steps worked well, as growth surged to about 10 percent in 2010–11 (Figure 1).

[1] Acemoglu and Ucer (2015).

Figure 1. Turkey: Selected Economic Indicators



Source: *World Economic Outlook* database, 2018.

6. With the implementation of UMP in major advanced economies, the situation pivoted to one of strong capital inflows and a widening current account deficit, reaching 9 percent of GDP in 2011. Unlike in the past, this deficit was driven much more by private sector borrowing than by government spending (Rodrik, 2015). By this time, some observers felt that the appetite for cooling an overheated economy through higher interest rates was limited given concerns about impacts on small- and medium-scale enterprises (Parkinson, 2012).

7. Against this background, the CBRT departed from orthodox inflation targeting in favor of an unorthodox policy framework that prevailed from 2010 to mid-2018 (Uysal, 2017). In 2010, the central bank governor noted that the CBRT had "slightly modified" its inflation targeting framework to highlight "the increasing role of financial stability in our objective function" (Yilmaz, 2010). In particular, the central bank put in place three instruments to reduce reliance on interest rates, help contain credit growth, and discourage capital flows:

(i) Differentiated reserve requirements: these were intended as a macroprudential instrument to limit bank loan growth and to encourage banks to fund themselves with core and long-term liabilities (rather than non-core and short-term liabilities).

(ii) A reserve options mechanism (ROM): this was another macroprudential instrument that allowed banks to voluntarily hold a portion of their mandatory reserve requirements for Turkish lira liabilities in U.S. dollars or euros (or gold). The intent was that this mechanism would serve as an automatic stabilizer, giving banks the incentives to alter the currency composition of their reserve requirements in line with changes in the costs of borrowing in foreign currency.

(iii) An asymmetric interest rate corridor: the CBRT switched its policy rate from the overnight rate to a one-week repo rate and allowed interbank money market rates to settle at rates that were quite far from this policy rate. Moreover, the overnight deposit and lending rates—the floor and ceiling, respectively, for interest rates—were positioned asymmetrically, that is, one was further from the target than the other.

According to CBRT Deputy Governor Uysal, these instruments provided a "multiple objectives and multiple instruments framework," which allowed the CBRT to meet the twin objectives of price and financial stability by flexibly adjusting the policy mix among these instruments as warranted by changing circumstances (Uysal, 2017).[2]

8. The CBRT adjusted the policy mix several times in response to global and domestic developments:

- At the end of 2010, following the Fed's launch of second-round quantitative easing (QE2), the CBRT lowered the floor of the corridor to discourage short-term capital inflows. In late 2011, it opted for a higher ceiling to prevent a reversal of capital flows as the euro area crisis intensified, and then lowered the ceiling gradually after mid-2012 as risks dissipated.

- The "taper tantrum" of 2013, along with domestic political uncertainty, resulted in a currency sell-off, and required a switch back to tighter monetary policy. The central bank increased the upper end of the corridor by 125 basis points and suspended liquidity provision at the policy rate (which it had not hiked) during designated exceptional days. This resulted in an average increase of about 200 basis points in the cost of funding for banks. In addition, the CBRT intervened in the FX market to resist depreciation pressures via auctions of about US$11.5 billion, which represented about 15 percent of net international reserves. However, these steps failed to sufficiently dampen the effects of increased risk aversion. Uncertainties regarding the political and geopolitical environment as well as the outlook for monetary policy contributed to further currency depreciation of about 15 percent in mid-2014. The CBRT initially intervened but soon shifted to hiking the one-week repo rate by 550 basis points.

- The growth slowdown of 2016—partly a result of uncertainties due to a coup attempt and declines in tourism activity after a series of terrorist attacks—resulted in further monetary policy shifts. The CBRT lowered reserve requirements, allowed greater use of gold and foreign currency to meet these requirements, and offered unlimited TRY liquidity against

[2] The overall approach of the authorities is described in Kara (2016).

FX collateral. Later in the year, in response to a steep exchange rate depreciation, the CBRT tightened monetary conditions through an increase in the one-week repo and overnight lending rates. The CBRT in effect increased the cost of funding to banks by almost 500 basis points, including through shifting liquidity provision from the policy rate facility to the more expensive late liquidity window. Economic growth rebounded in 2017, spurred by strong policy stimulus following the 2016 coup.

- The CBRT has gradually phased out the unorthodox policy approach starting from 2016. Eventually, in mid-2018, the CBRT reverted to a more orthodox approach. It raised interest rates by 300 basis points and announced that henceforth it would rely on a single policy rate (the one-week repo rate) instead of the flexible interest rate corridor system, a move supported by staff.

III. IMF ENGAGEMENT

9. The Fund supported the authorities' swift easing of monetary, fiscal, and financial policies in 2008–09, recognizing the adverse effects of the GFC on the Turkish economy. At the same time, the Fund warned that fiscal consolidation would be required in the medium term and that the central bank would need to exercise vigilance to meet the inflation target. As the Turkish economy recovered quickly, the Fund—in the 2010 Article IV Staff Report—advocated a tighter fiscal and monetary stance, particularly as inflation surged and the current account deficit widened. The IMF also recommended restarting FX purchases to rebuild reserves, as well as phasing out financial sector forbearance measures and strengthening macroprudential tools.

10. When the CBRT moved to the new monetary policy framework in 2010, the Fund initially provided cautious support. The Fund noted that the CBRT had "adopted an innovative approach" in the face of "unprecedented monetary easing in advanced economies" (IMF, 2011). Staff recognized that the CBRT was generally reluctant to increase policy interest rates, reflecting worries that small and medium-sized enterprises would be adversely affected by higher domestic borrowing costs. Interviews with staff suggest that they also gave some credence to the central bank's concerns that higher interest rates would attract increased capital inflows, further fueling credit growth and igniting inflation. Under these circumstances, staff supported the differentiated reserve requirements and the reserve options mechanism to contain credit growth, and the use of a wider interest rate corridor to generate increased interest rate volatility and a higher risk premium to discourage capital inflows. Staff characterized the CBRT approach as "innovative" and noted that it had been taken in the face of "unprecedented monetary easing in advanced economies" (IMF, 2011).

11. Subsequently, however, in the light of evidence that the new framework was not proving fully effective in containing pressures on inflation or credit growth or in narrowing the current account deficit, Fund staff started to take a more critical position. In 2012, staff urged 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." Staff ambivalence was reflected also at the Executive Board. At

the 2012 Article IV Board discussion, "many Directors saw merit in returning to a positive real policy rate under a conventional inflation-targeting framework" but "a number of Directors considered that, in the current environment of volatile capital flows, the more flexible policy framework has served the Turkish economy well."

12. After the "taper tantrum," there was further evidence that the new framework was proving unwieldy and resulting in the central bank being late in tightening the monetary policy stance during risk-off periods. Staff became more forceful in advocating a change in policies, noting that "while the [current] framework has been useful in some respects," the inflation target of 5 percent had not been met and the complexity of the framework "makes it difficult to communicate policy intentions to markets and to manage [inflationary] expectations. Although this may not have been a major problem in the pre-Fed tapering period, the change in circumstances warrants a different approach at this stage" (IMF, 2013).

13. As noted elsewhere in this evaluation (Turner, 2019), over 2010–12 the Fund's corporate view was evolving towards advocating that monetary policy should focus on macroeconomic goals and macroprudential tools should be the first line of defense to manage financial stability risks. From this perspective too, the Fund was critical of Turkey's unorthodox framework. For example, a case study of Turkey was included in the IMF's 2012 policy paper in which the Fund noted that the CBRT's deployment of macroprudential tools in 2011 had been forced by "the absence of an active and timely response" from the financial supervisor, the Banking Regulation and Supervision Authority (BRSA). However, once "key macroprudential measures were introduced by the BRSA in June 2011," the CBRT could have reverted to a more orthodox framework: "with too many objectives and too many goals, market participants became disoriented and confused when trying to deduce the prioritization of the various objectives and the ultimate goal of these policies" (IMF, 2012).

14. The authorities, however, remained committed to their monetary framework in 2014–15 and in fact continued to move the framework away from a conventional setup, for instance by limiting liquidity provision at the policy rate. At the same time, the CBRT was reluctant to engage capital flow management measures (CFMs)—which would have been difficult to undertake for an OECD member country—and expressed confidence that its framework could adequately manage the challenge posed by of volatile capital flows without such measures. Hence, the Fund's policy shift to provide greater recognition for the role that CFMs could play in emerging markets—a message delivered by the IMF Economic Counselor when he visited Turkey in 2014—did not gain much currency in Turkey (Blanchard, 2014).

15. As worries about growth prospects increased in 2016, the Fund recommended a neutral monetary stance and looser fiscal policies. Staff noted that a balanced monetary stance was needed to contain inflation but that some fiscal loosening was appropriate to support the economy, accompanied by strengthened macroprudential measures to lower foreign exchange risk. By 2017, with worries about growth receding, the Fund again advocated tighter monetary policy—via higher policy interest rates rather than through tighter liquidity management—and a

return to a conventional monetary policy framework. The CBRT gradually reverted to a more conventional policy framework, eventually deciding to fully take this course in mid-2018.

IV. ASSESSMENT

16. Based on evidence from interviews with Turkish officials and monetary policy experts, along with all IMF mission chiefs for Turkey over the past decade, there is a disconnect between how useful IMF staff feel they were to Turkey and the value of their advice as perceived by the authorities. The period 2008–09, when the authorities responded swiftly and the Fund supported their actions, is an exception. Otherwise, the officials interviewed felt that the Fund had been late in providing advice on some occasions and on many other occasions had been sympathetic to the authorities' goals but unable to provide concrete operational advice on how to achieve them.

17. The officials stated that in 2010 the Fund had been slow in recognizing the spillover effects on Turkey and other emerging markets from the use of UMP in major advanced economies. The challenges posed by capital flow volatility were not appreciated, and in fact were underplayed by Fund Article IV teams, When the CBRT took macroprudential measures and modified its monetary regime to manage these flows, staff tried to understand, and be sympathetic to, the heterodox framework in their consultations with the authorities. But their concerns that the framework would not deliver intended goals led them by 2012 to advocate a return to a framework with focus on price stability. The Turkish authorities indicated that after 2012 they spent a considerable amount of time trying to explain to the Fund why retaining the modified monetary framework was, including macroprudential measures, essential to mitigate the effects of excessive capital inflows. Though the Fund later itself became a very strong advocate of macroprudential measures to manage financial stability risks, in these early years officials felt that the IMF was not present as a source of support to CBRT.[3]

18. In interviews Fund staff indicated that they withdrew support only after the framework proved to be ineffective in meeting the authorities' goals from 2012 onwards. In contrast, officials felt that the framework worked better than Fund staff gave it credit for; for instance, some communications or moral suasion tools (e.g., announcing that credit growth of more than 25 percent would not be welcomed) and the differential reserve requirement tool (different weights for different currency reserves) were successful in slowing credit growth and lengthening the maturity of capital inflows. Moreover, officials felt that their framework would have performed much better if they had received more operational guidance on how to make it work. Fund staff were perceived as not providing concrete advice on the needed adjustments; interactions with BIS staff, held on the margins of the bi-monthly governors' meeting and more sympathetic to EM concerns, were found to be considerably more useful in this respect.

[3] The IMF's push for capital flow management measures to manage financial stability risks did not sit well with most Turkish officials interviewed. CFM was not popular in Turkey, given constraints posed by membership in the OECD and EU accession ambitions, and consequently the visit by the IMF's Economic Counsellor on the IMF's Institutional View caused considerable unease.

19. Moreover, officials still perceived a basic divergence between the IMF and emerging markets in the framework for analysis of developments in emerging markets and hence in their policy focus. Turkish officials felt that the source of their problems was the periodic surges of capital inflows due to changes in global risk appetite, which fueled credit expansion and inflationary pressures by lowering the funding costs of local banks. It was difficult for EM central banks to increase interest rates in the face of these developments, as that would only attract more capital flows and lead to further credit expansion and currency appreciation. The Fund's advice to raise interest rates to contain inflationary pressures was perceived as too single-mindedly focusing on the inflation goal, reflecting an advanced economy perspective. Officials agreed that at some point worries about inflation start becoming predominant and require interest rate actions, even at the risk of slowing the economy; however, it was felt that the Fund was not able to advise central banks and country officials in a flexible enough manner to keep them from ending up at that point. Officials also expressed regret that their early adoption of macroprudential policies, designed to deal with financial stability issues related to capital flows, was not given enough credit due to the Fund's excessive focus on interest rates.

V. CONCLUSIONS

20. The Turkish authorities took several unorthodox steps in adjusting their monetary policy framework in response to the spillover effects of UMP in advanced economies. The IMF initially supported many of these changes but scaled back its support over time as concerns about their effectiveness materialized. Fund staff feel that they provided adequate support to novel steps and would have continued to support them if they had thought they were working. The recourse to orthodox advice, in their view, was because current account deficits and inflationary pressures continued to loom large. Turkish officials, in contrast, characterized IMF advice as somewhat of a textbook nature and not sufficiently appreciative of the challenges faced by EM central banks. This mindset, they felt, kept Fund staff from providing the detailed operational advice that might have made their unorthodox monetary framework more successful.

21. The Fund might want to examine the process it uses to arrive at its perspective on unorthodox policies implemented by country authorities, especially during periods of heightened economic stress. In instances like these, it might be helpful to broaden the dialogue to include independent monetary policy experts. This could be achieved by organizing specific conferences bringing together monetary policy experts to provide their perspectives on issues where there are stark differences with the authorities. This might give country officials more comfort that their views, even if unorthodox, are being given a fair hearing and that the Fund is open to outside views in formulating its policy advice. The seminar jointly organized by the National Bureau of Economic Research and the Central Bank of Turkey provides a good model for such engagements.[4]

[4] See Ball, Kalemli-Ozcan, and Kenc (2014).

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