CHAPTER

3 Reserves and the Stability of the International Monetary System

17. In 2009–10, IMF Management advanced the argument that excessive reserve accumulation was jeopardizing the stability of the international monetary system.[6] This chapter traces the evolution of this thinking, in particular how it relates to the Fund's longer-standing concerns about the risks from global imbalances, and discusses reasons for the shift towards stressing the risks posed by excessive reserve accumulation. It assesses the conceptual framework behind the Fund's new approach, presents views of country authorities and academics, and discusses why the Fund's recent arguments have not resonated with much of the IMF's membership.[7]

18. The chapter concludes that the IMF has not provided a compelling argument why "excessive" reserves constitute a problem for the international monetary system. Furthermore, the focus on excessive reserves has not provided a substantially different perspective on risks to the system than that already embodied in the longer-standing concerns about risks from global imbalances, and indeed it appears to be less convincing than those concerns. It also tends to distract from the analysis of and responses to other risks to global financial stability that are regarded as more serious by many officials who were interviewed by the evaluation team.

19. Moreover, since a new metric to determine reserve adequacy levels in emerging market economies became associated with the recent emphasis on the dangers of excessive reserve accumulation, a number of country officials became worried that the use of this metric would lead to pressures on countries to reduce their reserves at a time of heightened uncertainty in the global economy. Their reservations were based on the view that reserves provide multiple services, and that a single indicator cannot capture the complexities associated with their costs and benefits which are likely to be weighed differently by each country authority.

A. Excessive Reserve Accumulation as a Concern

20. Through much of the past decade, the IMF was concerned about the impact of large and persistent current account imbalances in major economies and their consequences for the global economy. The main focus of this concern was the widening current account deficit in the United States and growing surpluses in East Asia, especially China. IMF policy advice centered on tightening U.S. fiscal policy; allowing the Chinese currency to appreciate through greater reliance on market forces in determining the exchange rate; promoting structural reforms in Japan and the euro area; and raising domestic spending in oil-producing countries.

21. In its analysis, the IMF did sometimes refer to excessive reserve accumulation. However, the Fund's analysis of what it saw as excessive reserves focused primarily on the domestic costs to the reserve accumulators and the multilateral repercussions of rising global imbalances, rather than on any inherent risk that excessive reserves might pose to the international monetary system. By 2009, Management began making this risk more explicit in a number of speeches (Box 1).[8] The evaluation team could only identify two papers (IMF,

[6]This chapter is based primarily on Dhar (2012).

[7]The evaluation does not question whether current account imbalances posed risks for the international monetary system. It simply takes as given that the IMF argued that such risks existed.

[8]The concerns appeared to be mostly about reserve accumulation rather than the stock of reserves, although in some instances the subject is not clear. For example, perceived risks to the value of the U.S. dollar were expressed both in terms of a reduction in the rate of accumulation of reserves and as a consequence of changes in the currency composition of the existing stock. In this evaluation the term "accumulation" is generally used to refer to the flow and "reserves" is used to emphasize the stock.

Box 1. IMF Management and Senior Staff Speeches and Remarks on Reserve Accumulation and International Monetary Stability

"In the long run, it is difficult to both meet the liquidity needs of the global economy and maintain macroeconomic stability in the reserve issuing country, a problem known as the Triffin dilemma. In effect, to meet the world's ever-increasing demand for international reserves, reserve issuing countries such as the United States need to run external deficits that eventually undermine confidence in their currencies." (IMF, 2009g)

"Such self insurance is costly both at the country level—given the forgone domestic absorption and the complications for monetary and exchange rate policy—and at the international level, where countries wishing to build up their reserves have tended to generate persistent current account surpluses. There is a real danger that in the wake of the current crisis, there could be renewed widespread efforts to add to reserves. It is clear that if such efforts are pursued simultaneously, one result would be to dampen the global recovery." (IMF, 2009a)

"Turning to the issue of an international lender of last resort, it is clear that one of the weaknesses of the existing international monetary system has been reflected in the accumulation of record official international reserve holdings, at least in part in an effort at self-insurance against a sudden stop in capital flows or international financial market illiquidity. It is generally agreed that reserve holdings represent a relatively costly form of crisis insurance, while at the same time the buildup of such reserves potentially could make it more difficult for the country or countries providing reserve assets to achieve fiscal and external balance." (IMF, 2010h)

"However, the dollar's continued dominance as an international reserve asset means that the global demand for reserve assets can only be satisfied if the reserve issuer runs external deficits. And there is no automatic mechanism that would mitigate an ongoing reserve build-up by surplus countries. This problem has been aggravated in recent years as the demand for reserves rose sharply—reflecting in part the desire of many large emerging markets to self-insure against costly capital account crises. Of course, in many cases the reserve build-up has far exceeded any conceivable insurance function." (IMF, 2010f)

"During the last two years, we at the IMF have tried to change the international monetary system, and not only at the margin—I think it is more important than that—by creating the so-called flexible credit line and recently the precautionary credit line, to try to help countries to avoid building up reserves and, by this process, creating more imbalances." (IMF, 2010e)

"But many countries remain to be convinced that the global financial safety net is strong enough to deal with the next crisis—and the costly accumulation of reserves continues well in excess of precautionary needs." (IMF, 2011e)

2009e and 2010g)[9] that provide some analytical basis for this thinking. Discussions about excessive reserves as a possible threat to the international monetary system have not figured in policy debates either in academic or related forums.

22. As expressed in IMF (2010g), a key concern was that investment of large reserves in government debt instruments could lower the cost of government borrowing and undermine reserve currency issuers' incentive to undertake fiscal adjustment. Another was that reserve accumulation in the form of claims on a small number of reserve-currency countries would make it more difficult for these countries to achieve external balance, and that this could heighten debt sustainability concerns and undermine the store-of-value characteristic of reserve assets. Lower yields could also cause the underpricing of risk, encouraging excessive risk taking and asset price bubbles. A rapid switch out of a specific reserve asset could disrupt the smooth functioning of international payments, with large and disruptive effects on exchange rates and wealth.

23. Each of these concerns had been expressed previously by the IMF in its pre-crisis discussions of global imbalances. Thus, while the emphasis on the dangers of excess reserve accumulation represented a shift in discourse, the underlying concerns were not different from the perceived risks associated with global imbalances cited on many prior occasions. However, the change in emphasis had different policy implications which created concerns in the membership (see the section "C. Emphasis on Reserves and the IMF's New Reserve Adequacy Metric" below).

24. Interviewees—from among senior IMF staff and former Management, as well as country officials—considered that the views of influential shareholders regarding the IMF's inability to influence China's exchange rate policy in the last decade were an important factor explaining why concerns about the stability of the international monetary system were expressed in terms of excessive reserve accumulation. Some officials

[9]IMF (2010c) also discusses the issue briefly, but focuses principally on exchange rate regimes.

and staff members also suggested that the emphasis on excessive reserves could have been influenced by a desire to draw attention to the potential benefits of the IMF's new credit facilities, the Flexible Credit Line (FCL) and Precautionary Credit Line (PCL), as alternatives to building reserves.[10]

B. Focus on Reserves: A Perspective Too Narrow

25. International reserves remain small relative to the global stock of financial assets under private management, and the fear that they could be used to destabilize the international monetary system seems misplaced.[11] Moreover, international reserves are the assets of governments and central banks, which have an interest in maintaining both international monetary stability and the value of their official assets.[12] These features do not preclude the possibility that in attempting to safeguard the value of their assets, official reserve managers could adversely affect financial stability, for example by withdrawing assets from a troubled or downgraded commercial bank or by selling a specific security. But this is not a problem associated with excessive reserve accumulation as such, since it could occur even when reserves are not excessive. This suggests that the manner in which reserves are managed may be an appropriate topic for monitoring, including by the IMF.

26. From this perspective, officials interviewed for the evaluation thought that the nature of incentives facing the managers of the much larger stock of private financial assets warranted closer policy attention. There is considerable historical precedent and economic analysis to suggest that concerns about global financial stability should focus more closely on trends in private asset accumulation and capital flows.[13] Country officials and private sector representatives also noted that the IMF should be more attentive to the accumulation of the private foreign assets that are the consequence of persistent current account surpluses, and which from a historical perspective have arguably been more destabilizing than official reserve accumulation.

27. Concerns about reserve accumulation have arguably been overstated. IMF (2010g) illustrated the implications of reserve accumulation with an extrapolation showing that if reserves continued to grow more rapidly than U.S. GDP and if their composition did not change appreciably, then the debt-to-GDP ratio in the United States would eventually become unsustainably large. While such extrapolations may have a certain pedagogical value, they are fraught with difficulties related to the rigidity of the underlying assumptions, a fact acknowledged by the Fund. Indeed, it would seem that as reserves grow relative to what reasonably can be considered prudent for precautionary purposes, they are increasingly likely to be invested at the margin in assets other than U.S. government securities.

28. Although a common understanding of global liquidity remains elusive,[14] the perception of reserve accumulation becomes more nuanced if it is benchmarked against other relevant capital market indicators. Figure 2 illustrates that notwithstanding their growth, global reserves remain small relative to global banking assets which themselves have experienced a leverage-induced "global banking glut" (Shin, 2011). The size of reserves falls to insignificance if compared to the sum of bonds, equities, and bank assets. The right-hand panel of Figure 2 illustrates that while international reserves grew relative to the outstanding stock of government securities of the main reserve-currency economies until 2007, the ratio has since stabilized. Hence, the growth of official reserves does not seem outsized in relation to the growth of other financial instruments and markets.[15]

[10]The PCL was subsequently replaced with the Precautionary and Liquidity Line.

[11]In 2010, assets under the global fund management industry were estimated at $117 trillion (The CityUK, 2011), compared to less than $10 trillion of official international reserves. The IMF (*GFSR*, April 2012) estimated global banking assets at $105 trillion in 2010, and the sum of bonds, equities, and bank assets at $257 trillion.

[12]Indeed, with the benefit of hindsight it can be argued that since the assets of a number of sovereign wealth funds (SWFs) were mobilized to invest in distressed financial institutions at the height of the global financial crisis, these government-linked institutions proved to be a stabilizing force at least in this instance. This has been acknowledged by the IMF (*GFSR*, September 2011).

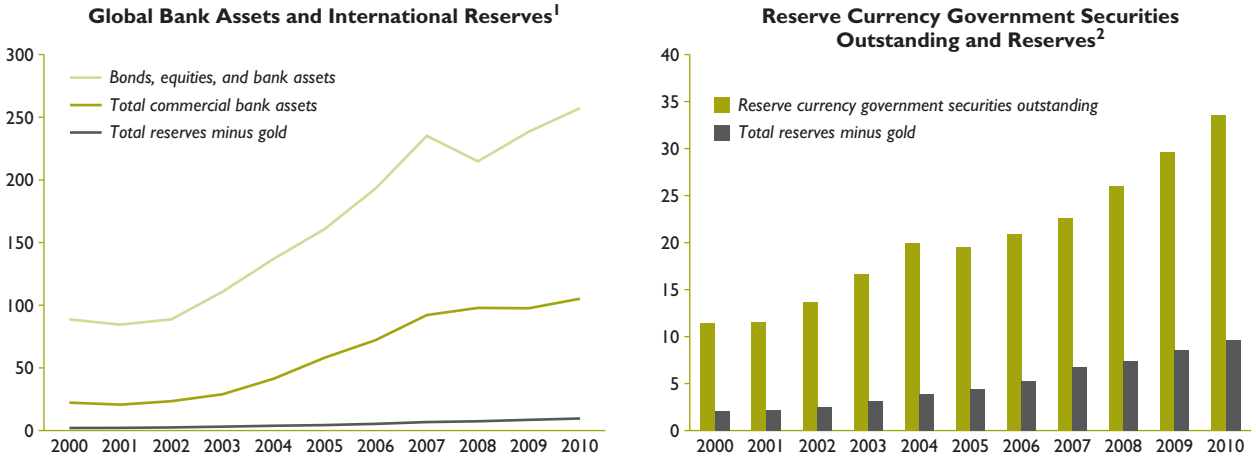
[13]For example, Borio and Disyatat (2011) argue that "[t]he focus on global current account imbalances misses the role of European banks in supporting the boom in US housing credit and the subsequent collapse of such financing."

[14]See, for example, Bank for International Settlements (2011); Domanski, Fender, and McGuire (2011); and IMF (2011c).

[15]These comparisons should by no means be interpreted as the "right" yardstick against which to measure reserves. However, they suggest that some broader considerations might be useful in judging whether the size of official reserves constitutes a danger for the international monetary system. It should also be noted that including assets held by SWFs in the reserve calculations would not change the picture significantly.

Figure 2. Reserve Accumulation: How Excessive?

(In trillions of U.S. dollars)



Sources: World Federation of Exchanges; Bank for International Settlements; IMF, *International Financial Statistics*; and ©2012 Bureau van Dijk Electronic Publishing-Bankscope. For more information, see IMF, *Global Financial Stability Report*, April 2012, Statistical Appendix, Table 1.

[1]Bonds, equities, and bank assets is the sum of stock market capitalization, international and domestic debt securities, and total commercial bank assets.

[2]Reserve currency government securities include securities from the euro area countries, Japan, the United Kingdom, and the United States.

29. Moreover, from a domestic perspective, reserves may not have grown excessively if compared to a broad measure of external liabilities. For example, in the major economies of East Asia other than China—which include some of the largest reserve accumulators of the past decade—reserves remained relatively stable if measured against external liabilities over the past decade (He, 2011).[16] This is consistent with the view, expressed by many country authorities, that the rising precautionary demand for reserves was due in large part to rising private capital inflows that were viewed as volatile and reversible (see Chapter 4 below).

30. Most country officials interviewed for this evaluation also felt that in a discussion of the stability of the international monetary system, there were more pressing issues to be considered. These included the fluctuating leverage in global financial institutions and its impact on global liquidity conditions and hence capital flows and exchange rate volatility; the role and effectiveness of prudential regulations and supervision in mitigating risks associated with cross-border finance; and the difficulty in managing capital flows in recipient countries. While the Fund has begun to address some of these issues, the discussion of reserves has not yet been placed in the broader context of the various potential risks to global financial stability, of which reserves constitute a marginal component.

31. In addition, a number of interviewees, from among country officials and former IMF Management, were of the opinion that the IMF's analysis of capital flows—and by extension of reserve accumulation, a large part of which they regard as a consequence of such flows—has not been evenhanded, in the sense that the Fund's policy attention and advice have focused on the options available to the recipients of private capital flow surges, whereas the factors driving such surges at source have not been addressed as comprehensively. The latter factors were thought to reflect the loosening of financial regulation and shifts in monetary policy in reserve-currency countries, and the interaction between regulatory and monetary policies. In this view, understanding these interactions and their policy ramifications is important, especially since from the recipients' perspective there are no costless ways of dealing with capital flow volatility.

32. Similarly, several country officials regarded reserve accumulation as a symptom and not the cause of potential instability. In particular, they thought the threats to stability originated not from reserve accumulation per se but from the policies underlying the accumulation, which included the fiscal, monetary, regulatory, and exchange rate policies of major deficit and surplus economies. For many other emerging markets, even those inclined towards a flexible exchange

[16]With external liabilities defined as the sum of foreign direct investment, portfolio equity, debt, and derivatives liabilities.

rate regime, intervention and hence reserve accumulation were considered legitimate responses to surges in capital inflows on the one hand, and to the competitive pressures from countries adopting more rigid exchange rate targeting, on the other.

33. In some cases of particularly noteworthy rates of reserve buildup, IMF staff also implicitly recognized that reserve accumulation was primarily a symptom of deeper structural factors and policies. Illustratively, in the cases of China, Japan, and Switzerland—countries which accounted for a significant proportion of world reserve growth during the period under consideration—Article IV discussions did not focus on reserves as such but on the more fundamental issues involved, appropriately so in the view of the evaluation team.

34. For example, when international policy issues were raised in discussions with China, the IMF focused mainly on China's large current account surplus.[17] Substantial discussions took place on the causes of the surpluses, on the respective contributions of exchange rate developments and a number of domestic structural and macroeconomic factors. There was, of course, recognition that the exchange rate regime had implications for reserve accumulation, which in turn created difficulties for monetary management. Staff used this line of reasoning to argue that greater exchange rate flexibility would be beneficial for the Chinese economy and would at the same time contribute to reducing global imbalances.[18]

35. In the cases of Japan and Switzerland, the IMF also engaged the authorities in discussions focusing on the underlying policy issues directly, instead of invoking reserves per se. For example, when the Swiss authorities intervened heavily during 2009–10 to counter deflationary pressures and to prevent excessive appreciation of the Swiss franc, the IMF supported the use of interventions as a quantitative easing strategy. Staff did not invoke any threat to the stability of the international monetary system from large-scale reserve accumulation as a reason to eschew interventions. Similarly, when the Japanese authorities intervened in the foreign exchange market during 2010 and 2011, Fund staff did not object. In both these cases, had the focus been on reserves, the IMF would have found it more difficult to acquiesce in the interventions which were seen as justified on domestic stability grounds.

36. The evaluation team came to the view that the IMF had focused on the appropriate issues in its discussions with the above-mentioned countries, and that bringing up the issue of excessive reserves would not have been helpful. Even those country officials who sought a tougher line with China considered the main issue to be about current account rebalancing and exchange rate adjustment, and not reserve accumulation as such.

37. This is not to say that indiscriminate reserve accumulation should be ignored or encouraged, or that it has been. Indeed, IMF staff have pointed to domestic costs of reserve accumulation in terms of quasi-fiscal costs and the implications for monetary management. Staff have also pointed out that interventions in the foreign exchange market can constrain needed adjustments in current account imbalances. In the illustrative cases mentioned above Fund surveillance appropriately focused on the costs and benefits of the policies that lead to reserve accumulation as a byproduct, rather than focusing on the byproduct itself. These examples illustrate that the emphasis on reserves as a focus of policy attention has been unnecessary.

C. Emphasis on Reserves and the IMF's New Reserve Adequacy Metric

38. IMF Management's emphasis on excess reserves as a problem for the international monetary system turned out to be a source of controversy, because it became associated with a strategy to "attenuate the demand for international reserves…by collaborating on reserve adequacy" (IMF, 2010g). One element of this strategy would be "agreeing on an adequate level of reserves for precautionary purposes." This would be underpinned by Fund "guidance on desirable ranges of precautionary reserve levels given country circumstances" to which "countries could agree to align their reserve accumulation policies." Subsequently, this guidance was developed in the form of a new metric for reserve adequacy in IMF (2011b) (see Box 2).

39. Country officials perceived the Fund's introduction of the reserve adequacy metric as a strategy to limit reserve accumulation, and as such they worried that it could become a rigid benchmark to assess members' compliance with obligations vis-à-vis the IMF at a time

[17]The 2011 Article IV Report also makes reference to possible consequences for interest rates in advanced and emerging markets of a hypothetical reallocation of China's reserves from U.S. government liabilities to claims on emerging markets. As already mentioned, this is not an issue specific to excess reserves as such, since it could arise even if reserves are not excessive.

[18]Some interviewees believed that the IMF's message to China should have been tougher and that its analysis of the impact of China's exchange rate policy on global imbalances was deficient, in particular because it did not take sufficient account of its influence on the exchange rate policies of other countries in East Asia.

Box 2. The IMF's New Reserve Adequacy Metric

The reserve adequacy metric developed by the IMF in 2011 is a refinement of the ratio-of-reserves-to-short-term-debt indicator that had been proposed a decade earlier. It explicitly recognizes that drains on reserves can originate elsewhere than in the obligation to service short-term debt. Specifically, the new metric combines short-term debt, other (medium- and long-term debt and equity) portfolio liabilities, the stock of broad money, and exports in a composite gauge of potential foreign exchange pressure. The relative weights of each of the factors are determined by the size of the drains in past periods of stress in the foreign exchange market.

The new metric received mixed reviews from staff and country officials. The more granular approach to thinking about sources of drains on reserves was welcomed as an improvement over the simple reserves-to-short-term-debt ratio. However, the lack of country specificity in the approach came in for criticism. In particular, the fact that the weight attached to each of the components in the metric is common across all countries was viewed as a drawback. In addition, since weights are estimated based on historical patterns they may need to be adjusted as the structure of financial linkages evolves over time. Moreover, the level of reserve coverage the authorities view as "comfortable" depends on many factors that cannot be captured in a single indicator.

Assessments of reserve adequacy based on the new metric have been facilitated by an internal IMF website promoting its use, and have already been incorporated in several Article IV consultations as an additional indicator in the analysis of external stability.[1] Indeed, several IMF staff members mentioned in interviews that they believe the new metric has become an integral part of reserve adequacy assessments. In some cases, country-specific information has been incorporated in the computations of the new reserve adequacy metric. There are differences of opinion on whether such modifications are appropriate. Country officials and some staff felt that adjusting the "risk weights" to reflect country-specific circumstances would make the metric more useful and relevant in country contexts. Other staff were of the opinion that such adjustments are not warranted if the objective is to use the metric as a tool for cross-country comparisons.

[1]It has also been included in the recently launched Pilot External Sector Report (IMF, 2012).

of heightened uncertainty in the world economy. As noted above, they were uneasy about the potentially prescriptive assessments of reserve adequacy based on this indicator, either as a stand-alone measure or in combination with other indicators, and they saw a risk that the indicator could become a one-size-fits-all measure applied in a pro forma manner. Their reservations were based on the view that reserves provide multiple services, and that a single indicator cannot capture the complexities associated with their costs and benefits which are likely to be weighed differently by each country authority.[19] The lack of a solid analytical framework explaining why reserve accumulation should pose a threat to the international monetary system further diminished many members' enthusiasm for any IMF strategy to set upper limits on countries' reserve levels.

[19]The discussion of the new reserve metric at the IMF's Executive Board revealed differences of opinion regarding its usefulness. Some Directors welcomed it as an improvement over previous indicators, while others raised doubts about its ability to capture country-specific reasons why countries accumulate reserves. Directors ". . . looked forward to further clarification on how the new risk-weighted metric fits into the Fund's surveillance and policy discussions" (IMF, 2011d).

40. Even if a solid framework could be articulated, the ability to implement a strategy to "attenuate the demand for international reserves" would depend on finding solutions to several additional issues. In particular, most country officials interviewed did not consider their own countries' reserves to be systemic. While some agreed that their countries' reserves were larger than their precautionary needs, they did not think that they were large enough in a global context to pose a threat to international monetary stability. IMF staff working on those countries tended to agree. This implied that the IMF would need to identify at what point the reserves of a country—or of a group of countries—become large enough to be considered systemic. In addition, any indicator of the systemic impact of excessive reserves would need to take into account the size of a country's excess reserves not relative to the size of the country's own economy but relative to the size of global excess reserves.

41. Country officials also drew attention to the fact that if advice on reserves at the country level was motivated by concerns about the stability of the international monetary system, it would have fallen outside the scope of the IMF's bilateral surveillance. This is

because the authority of staff to engage member countries in a dialogue about cross-border implications of their reserves policies was limited.[20] Therefore, the IMF would need to have a compelling argument to convince authorities that they should forgo some of the benefit they perceive to be associated with holding reserves in order to reduce the alleged risks they create for the rest of the world. In the case of international reserves and the international monetary system the Fund has not provided such an argument.

[20]In practice, however, the IMF has discussed international spillovers from its members' policies on an ad hoc and voluntary basis, with the permission of its members, for example, in spillover reports for a select group of countries in 2011 and 2012 and in the 2006–07 multilateral consultation with a set of five member countries. A new Integrated Surveillance Decision was approved by the IMF's Executive Board in July 2012. This decision encompasses both bilateral and multilateral surveillance and clarifies how international spillover effects may be addressed in the course of IMF surveillance.