Chapter 1
Reform of the International Monetary System: Introduction and Overview

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Abstract This chapter provides an overview of the issues related to reform of the international monetary system in light of experiences during the global financial crisis of 2007–2009 and related developments, particularly the eurozone sovereign debt and banking crisis, with a focus on the implications for Asian economies. Contributions by various international experts are presented focusing on topics covering policy reforms on how to develop balanced policy frameworks that support currency stability, monetary policy independence, and an increasing degree of financial openness, and how to build robust, resilient financial systems that can serve the interests of the real sector in a stable manner and absorb shocks coming from volatile capital flows and global financial turmoil. The thematic topic areas covered include (i) international monetary system reforms, (ii) managing international capital flows, (iii) Asian currency arrangements, (iv) regional financial cooperation, and (v) linking regional and global initiatives.

Keywords Capital flows • Currency cooperation • Currency stability • Global financial safety nets • Monetary cooperation

1.1 Introduction

The global financial crisis of 2007–2009 and its aftermath have led to much debate about the shortcomings of the international monetary system and possible reforms. These perceived shortcomings include excessive reliance on the US dollar as the key international reserve currency, which led to liquidity shortages even in

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countries whose economic and financial fundamentals were sound; weakness of global economic and financial surveillance to identify emerging economic and financial vulnerabilities in systemically important economies; lack of an international framework for dealing with volatile international capital flows and currency movements in a period of ultra-easy monetary policies adopted by major developed economies; and an inadequate global financial safety net to contain rapid and steep exchange rate depreciations in affected economies.

The key issues analyzed in this book are the reforms and innovations that are needed to improve the international monetary and financial system to promote financial stability and sustainable economic growth for emerging economies. The chapters are divided into the following thematic areas: (i) international monetary system reforms; (ii) managing international capital flows; (iii) Asian currency arrangements; (iv) regional financial cooperation; and (v) linking regional and global initiatives.

1.2 International Monetary System Reforms

In Chap. 2, Yung Chul Park and Charles Wyplosz review some of the current issues and debates on the international monetary system, including the role of the US dollar and possible competitors as international reserve currencies, the background and merits of capital controls in a new global financial environment, future prospects of regional monetary arrangements, the prospect of increased use of swap agreements among central banks, and the role of the Group of Twenty (G20) leaders' summit process. They note that globalization and the rise of emerging markets are bringing to the forefront issues and changing the balance of power in an international monetary system that retains the imprint of the Bretton Woods Conference of 1944. The financial crises in the United States (US) and Europe have also brought a new impetus for change.

Regarding the future role of the US dollar as the international reserve currency, they conclude that, despite its deficiencies, it will remain dominant for some time. Gold no longer serves as a currency, and other international currencies have major shortcomings. The eurozone sovereign debt and banking crisis undermined the attractiveness of euro assets as international reserves, the role of the yen is declining, and the US bond market remains unrivalled in terms of depth and liquidity. At this stage, neither the yuan nor the Indian rupee are fully convertible, and the capital markets in the People's Republic of China (PRC) and India are still relatively closed. Some scholars have proposed an increased role for special drawing rights (SDR) as a reserve currency, but they note that SDRs simply represent a draw on the underlying currencies that make them up, and that central banks of the reserve currency countries are unlikely to agree to open-ended commitments to print their currencies without their control.

Park and Wyplosz review the background and merits of capital controls in the new global financial environment. Talks about an impending currency war have

attracted attention once more to potentially disrupting capital flows. Exchange rate overvaluation is often followed by sudden stops and destructive reversals. A long tradition has called for the use of capital controls to discourage capital movements that are driven by herd behavior as opposed to economic fundamentals (Eichengreen et al. 1995). The International Monetary Fund's (IMF) position on capital flow management, previously seen as hostile, has changed, as was seen at the G20 Summit in Seoul in November 2010. Refining capital flow management instruments, and making them better attuned to present day markets, may bring further changes to the conventional wisdom. The G20 could play a central role in coordinating surveillance of and policy responses to capital flows.

Park and Wyplosz also discuss future prospects of regional monetary arrangements or financial safety nets. The 2007–2009 global financial crisis dimmed much of the earlier hope that the Chiang Mai Initiative Multilateralization (CMIM) arrangement would become operational. It is clear that deep regional monetary integration is more difficult than has been officially recognized so far. Another set of questions relates to what type of links between regional monetary institutions and the IMF would be appropriate and how their activities could be coordinated to consolidate and improve the efficiency of a global safety net. The G20 may need to undertake a review of the size and operational details of the CMIM together with its links with the IMF to determine whether it could be an effective regional mechanism. They also examine the prospect for increased use of swap agreements among central banks. Swap agreements existed before, and they were activated on a wider scale than previously in the aftermath of the collapse of Lehman Brothers in 2008. They were particularly important in light of the reluctance of many countries to borrow from the IMF because of "stigma" concerns about IMF conditionality. The question is how to institutionalize such agreements. The swaps could be permanent agreements or they could be activated in times of emergency along an agreed-upon template. On the other hand, unlimited swaps raise serious moral hazard issues. This moral hazard issue could be addressed via a process of prequalification for unlimited swap access similar to the IMF's recent new loan facilities.

Finally, they discuss the creation in 2008 of the G20 leaders' summit and the role it can play in fostering global economic and financial stability. For the G20 to matter, it should be able to ensure that the systemically important countries such as the US adopt appropriate strategies if and when their economic and financial situations become a threat to global stability. The experience with the G20 so far confirms that soft coordination is unlikely to be effective. Growing interdependence implies that the externalities are becoming more numerous and more sizeable, and therefore enhances the case for policy coordination. They argue that effective coordination means that individual countries would accept to carry out policies that they would not choose otherwise. This can be in their best interest because of externalities, but internalization is often perceived as a loss of sovereignty.

In conclusion, Park and Wyplosz argue that few current reform proposals are appealing to both developed and emerging economies alike. Even countries such as France that have been at the forefront of leading the reform movement are no longer as vocal as they were before. Paradoxically, the dollar's role as the dominant

reserve currency has been reinforced as the eurozone economies are struggling to keep the single currency arrangement alive and the talk of elevating the status of SDRs has not proceeded. However, one result of recent developments is that the IMF has made progress in bringing itself back onto the center stage of global macroeconomic management. Park and Wyplosz argue that the future of the international monetary system will depend on the prospects for recovery in the eurozone. If the eurozone economies emerge from the crisis with regained competitive strength, the momentum for reform of the international monetary system and the need for the G20 process will dwindle and the world currency arrangement and economic management will be shaped by a three-polar system consisting of the US, the PRC, and the eurozone. However, if the eurozone crisis is prolonged, both developed and emerging economies will have to turn to the G20 summit as the only international forum where they could agree on what is to be done, although few of their decisions will be enforceable.

1.3 Managing International Capital Flows

Policy perspectives on international capital flows have shifted markedly over time. Since the 1980s developing countries have been urged to deregulate their financial markets and encourage international capital flows. The flows were seen as beneficial and any attempts to control them were seen as largely futile. The 1997–1998 Asian financial crisis should have modified this mindset. There were many issues involved, but the huge inflow of capital beforehand led to unsustainable macroeconomic and financial imbalances that unwound during the crisis, and the adjustment to these imbalances left a legacy of lost output, financial sector problems, and ongoing distortions to policy. To the extent that the policy message changed, however, it focused on the desirability of floating exchange rates as the buffer that would ensure the benefits of capital flows.

In Chap. 3, Stephen Grenville looks at the response of the East Asian emerging economies to the 1997–1998 Asian financial crisis and the impact this had on capital flows, including in economies that were not directly affected by the crisis. He first tracks the changing view on capital flows, particularly in the IMF, the motivations for capital flows (mainly the intrinsic differences of profitability between emerging and mature economies) and the data on flows. He then reviews the widely accepted set of benefits associated with capital inflows, and finds that these are largely irrelevant in the context of East Asia. Finally, he offers a tentative outline of a different approach, in which capital flow management might figure more prominently.

Grenville notes that the shift of the policy mindset back in favor of capital flow management raises a number of difficult policy options that were not considered previously. Are some of the components of inflows more beneficial than others and are some components more amenable to management? What instruments are

effective in managing flows? How will international tensions be resolved where there is conflict between different country managements?

The case for free capital flows traditionally was based on the following arguments: foreign direct investment brings technology and managerial skills; funding for investment can be obtained in larger volume and more cheaply; consumption smoothing occurs in the face of adverse shocks; risk is spread and portfolio diversification can occur; and it provides discipline for macroeconomic policy. However, in practice these advantages look much less compelling. First, when countries' savings exceed investment, domestic funding is already sufficient. Second, a lower cost of funds may interfere with the appropriate level of the domestic monetary policy rate. Third, the procyclicality of capital flows may exacerbate domestic economic and financial cycles, thereby threatening financial stability.

Grenville argues that there are strong reasons to expect that capital flows will increase over time. On top of the structural interest rate differentials reflecting higher growth rates in emerging economies compared with developed economies, the cyclical differences are likely to become stronger. He argues that Europe, Japan, and the US are likely to experience continuing low policy interest rates for some years, while, if the emerging economies maintain their growth, higher policy rates will be needed to offset inflation pressures. The institutional infrastructure of emerging economy financial markets will develop more depth to facilitate extra flows, market information will improve, and credit rating agencies will reduce their bias against emerging economies. The primary advice routinely given to emerging economies is to maintain strong macroeconomic policies, which will help cope with any reversals. However, the stronger their policies, the more attractive these economies will be for foreign investors and the greater likelihood that excessive inflows will be experienced.

Grenville's proposed alternative approach starts with the assumption that capital flows may be attracted because of interest differentials that are both structural (that is, long lasting) and substantial, not just temporary, as the IMF view implies. At the macroeconomic level, currency policy should allow the exchange rate to move more flexibly and symmetrically in response to changes in the current account balance. He also suggests two capital flow measures: first, a withholding tax that approximates domestic tax rates; and second, a Brazilian style tax on portfolio and banking flows, with a maximum rate equal to the difference between the domestic and foreign policy interest rates.

He argues that such a framework would make emerging economies more confident to open their external accounts, allowing real and financial inflows and fostering the deeper financial infrastructure that accompanies these flows. The strategies proposed by Grenville could provide a stronger basis for encouraging flows than either the policies of reserve accumulation, or the partial, tentative, and half-hearted capital-management responses advocated in recent IMF studies.

Facing a fragile recovery of the world economy from the global financial crisis of 2007–2009, policymakers around the globe are contemplating what would be an optimal mix of open macroeconomic policies that are effective enough to guide their economies to stable and sustainable economic development. In Chap. 4,

Hiro Ito and Masahiro Kawai argue that the world economy is still full of unstable factors.

In particular, whether they deteriorate or recover, circumstances in developed economies can rapidly change the direction of international capital flows, possibly causing disruptions in the capital markets of emerging economies. Therefore, policymakers in emerging economies must consider what macroeconomic policy mix can minimize the impacts of global instability on their economies and sustain stable economic growth. Ito and Kawai address this issue using the hypothesis of the "impossible trinity," or "trilemma," a constraint faced by policymakers in an open economy setting. This hypothesis states that a country may simultaneously choose any two, but not all, of the three goals of exchange rate stability, financial market openness and monetary policy independence to the full extent.

Aizenman et al. (2008) developed a set of trilemma indexes that measure the degree of achievement of the three policy choices for a wide coverage of countries and periods. Using the indexes, they empirically supported the hypothesis by showing that the three measures of the trilemma are linearly related to each other. Although the indexes developed in Aizenman et al. (2008) cover many countries and years, the approaches they employed to get wide country coverage may have sacrificed some nuances, potentially exposing the metrics to debate. Ito and Kawai develop a set of new and more refined indexes that measure these policy choices that address some of the weaknesses in the approach of Aizenman et al. (2008). However, they note that efforts of aiming for a higher level of refinement for the indexes come with a cost; the coverage of countries is smaller.

Ito and Kawai test the trilemma hypothesis by examining whether the sum of the three indexes statistically equals the value two, the value predicted by the hypothesis. They found statistical evidence for the sum of the three indexes being equal to two, particularly for middle- and low-income economies and emerging economies. This finding supports the view that monetary authorities do face the trilemma constraint in setting open macroeconomic policies.

Ito and Kawai present the evolution of the economies' policy mixes on the well-known trilemma triangle. In particular, they show that the PRC has not moved much toward exchange rate flexibility and capital market openness and that the Association of Southeast Asian Nations (ASEAN) economies still have room to open their financial markets further, moving away from their current policy preferences of maintaining relatively high levels of monetary policy independence and exchange rate stability with limited financial market openness.

They conclude that, while the sum of the newly defined indexes must add up to the value two theoretically, in reality it can deviate from two in the short term. However, the trilemma hypothesis suggests that a policy combination that creates a large and persistent deviation from two is unsustainable, and, hence, should be corrected by economic disruptions such as a financial crisis or by policy changes that eliminate such a deviation. Ito and Kawai argue that their new trilemma indexes could be used to identify the extent to which a country's policy mix is unsustainable.

1.4 Asian Currency Arrangements

Economic integration in Asia has evolved differently than in Europe. In Europe, economic integration was driven by a top down approach through coordinated initiatives and the creation of regional institutions with the objective of forging a united front across various countries. The creation of the euro was a key example of this. In contrast, in Asia, market forces largely have driven economic integration. Currency policy coordination in Asia, to the extent it exists, has also largely been ad hoc. However, the emergence of the yuan as a potential key regional and global currency and increasing economic integration in the region provide incentives for greater regional currency cooperation.

In Chap. 5, Yongding Yu examines the progress of yuan internationalization since 2009. As the world's second largest economy and largest trading nation, the PRC needs a currency that can match its economic status in the global economy. While many PRC economists support the internationalization of the yuan as a long-term goal, worries about the possible negative impact of the current push for yuan internationalization on the country's financial stability and welfare have emerged. Yu finds that the PRC does not yet have a viable road map for yuan internationalization and argues that the policy in the short term should focus on more urgent challenges such as the needs to reform its exchange rate regime and liberalize domestic interest rates.

Yu first surveys the literature on the definition and characteristics of an international currency and the degree to which the yuan fulfills them. He starts with the standard view that an international currency should be a store of value, a medium of exchange, and a unit of account for both residents and nonresidents, and for both official and private sectors. Yu also emphasizes the importance of the distinction between the roles of invoicing and settlement, arguing that the former is more important than the latter for an international currency.

Next he analyzes the purported benefits to the PRC of yuan internationalization. These include reducing exchange rate risk, reducing trade transaction costs, improving the funding efficiency and international competitiveness of the PRC's financial institutions, and reducing the need for the PRC to hold dollar assets.

He then describes and assesses the PRC's road map of yuan internationalization, examines its progress, and discusses the relationship between yuan internationalization and capital account liberalization. Yuan internationalization started with the promotion of the use of the yuan for settling imports from Hong Kong, China. However, he notes that when trade is settled in yuan, it is not necessarily invoiced in yuan. In the PRC's road map, promoting the use of the yuan as invoicing currency has rarely been explicitly discussed. Yu argues that the PRC's objective seems to be to increase holdings of yuan assets in Hong Kong, China and other offshore centers, and to create a return flow mechanism. However, the question of how the yuan will play the role of a denominating currency for international financial assets has not been explicitly addressed in the PRC's roadmap. He concludes that there are too many missing links in the road map, and

the yuan's journey could be bumpy and may not end up at the planned destination. Yu highlights that yuan internationalization since 2010 has shown a clear pattern of asymmetry—the use of the yuan as an import settlement currency rose quickly, but not for exports. Yuan denominated bonds met strong demand, yet nonresidents had no incentive to issue them. And, while Hong Kong, China banks are happy to extend yuan loans, they are not welcome by borrowers. This asymmetry partly reflected yuan appreciation expectations, but also opportunities for exchange arbitrage between the onshore and offshore markets as a result of the relatively closed capital account. Significantly, these developments have perversely led to a further increase in foreign reserve holdings, the opposite of what was intended.

The internationalization of the yuan requires liberalization of the capital account and yuan convertibility. Yu argues that, due to the fragility of the domestic financial system and its lack of attractive financial instruments, the PRC's liberalization of the capital account and hence the internationalization of the yuan must proceed in a gradual fashion. Yuan internationalization should be a natural course of economic development and capital account liberalization. To push yuan internationalization in an artificial way would be counter-productive. Policies aimed at promoting yuan internationalization should not be based on the assumption of yuan appreciation. Otherwise, internationalization will not be sustainable.

Yu concludes that the PRC's growing economy and trade volume are favorable conditions for currency internationalization. However, other conditions, such as the existence of deep and liquid financial markets, have not been met. To create conditions for the internationalization of the yuan, the PRC government should encourage financial markets to play an increasingly important role. Also, correct sequencing is important. Without first establishing domestic financial reform, that is, market-determined interest rates and exchange rates, yuan internationalization could easily go astray. Only when the PRC's financial reform makes an important breakthrough, can the internationalization of the yuan make meaningful progress.

In Chap. 6, Abhijit Sen Gupta argues that the rising interdependence among Asian economies makes it paramount to ensure a degree of exchange rate stability among the Asian economies. However, this will be challenging in a global environment that has been increasingly volatile since the US subprime mortgage crisis in 2007. The lure of developing Asia's strong fundamentals along with the uncertainty in the global environment will lead to increased volatility in capital flows. In this context, greater exchange rate flexibility vis-à-vis the developed economies will help economies to maintain macroeconomic and financial stability. Thus Asian economies could gain from pursuing a strategy whereby they maintain relatively stable exchange rates within the region and allow greater flexibility against extra-regional currencies. This would require a certain degree of exchange rate policy coordination (Kawai 2010).

Gupta notes that one way to achieve greater exchange rate coordination is to have a regional currency as the anchor. Given the size of their economies, Japan and the PRC could possibly take on this role. However, Japan has been suffering from

stagnant growth, while the PRC's capital account is not sufficiently open for the yuan to play such a role.

An alternative approach is to establish a currency basket as a reference exchange rate. Gupta reviews the literature that proposes an Asian currency unit (ACU) comprising a basket of 13 regional currencies—the ten members of ASEAN, the PRC, Japan, and the Republic of Korea (Kawai and Takagi 2005; Ogawa and Shimizu 2005; Girardin and Steinherr 2008). Such a basket would help to monitor the collective movement of the participating currencies compared with external currencies as well as the movement of the individual currencies compared to the regional benchmark. The regional benchmark could also be used to denominate regional assets and transactions such as bonds, loans, bank deposits, and foreign exchange deposits.

The theory of an optimum currency area argues that economies that are affected by shocks in a symmetric manner should form a common currency area (Mundell 1961). Economies facing asymmetric shocks can also attempt to form a common currency area, if there is a sufficient degree of price flexibility and high labor and capital mobility to ensure that there are no persistent pockets of unemployment. Other criteria include similarity of preferences regarding trade-offs between output and inflation and provision of supporting policies like fiscal transfers. However, some of the traditional prerequisites for establishing a common currency area can develop after economies have established a currency area by fixing their exchange rates. The establishment of a common currency area can lead to an increase in the degree of economic integration as well as symmetry of economic shocks.

Gupta finds that economic fundamentals suggest that some economies in Asia are more suited to undertake greater exchange rate coordination. Greater exchange rate coordination helps in significantly reducing transaction costs involved with international trade as well as reducing exchange rate uncertainty and the scope of speculation on changes in bilateral exchange rates that can result in instability in foreign exchange markets with negative effects on economies' internal and external balances. But such coordination also involves the cost of imposing constraints on monetary policy, which is an important tool for stabilizing the economy.

Gupta constructs an ACU for 15 economies (the above 13 economies plus Hong Kong, China and India), using weights assigned are based on the average of the individual economy's share in regional gross domestic product (GDP) measured at purchasing power parity, intraregional trade, and intraregional investment. He uses this to estimate deviations of both nominal and real exchange rates from the ACU, and then constructs a measure of average weighted deviations of the member economies. Using statistical tests, he finds some mixed evidence of convergence for both nominal and real exchange rate deviations in specific periods, but convergence is rejected looking at the entire period from 2000.

He believes that this lack of convergence primarily reflects the different exchange rate regimes followed by these economies. Using the Frankel-Wei methodology, he finds that, while the smaller members along with the PRC have maintained a close peg with the US dollar, other economies such as Singapore, the Republic of Korea, and Indonesia have reduced the linkage with the dollar.

He argues that it is important to reduce the divergence among the various exchange rate regimes to move towards a path of exchange rate convergence. The most realistic option would be the adoption of a managed float regime that will stabilize intraregional exchange rates and at the same time provide flexibility against external currencies.

Gupta concludes that the introduction of an ACU as a parallel currency, while providing the benefits of exchange rate coordination, will alleviate the costs by allowing some degree of monetary policy autonomy. The monitoring of an ACU and the deviation of the participating currencies from this regional benchmark can play an important role in the regional surveillance process. An ACU could also act as a benchmark to initiate policy dialogue on greater exchange rate coordination.

1.5 Regional Financial Cooperation

In Chap. 7, Stefan Collignon argues that the European sovereign debt and banking crisis is due partly to fundamental economic developments, such as growth and competitiveness, and partly to uncooperative behavior between policymakers of the major countries in Europe. One of the paradoxes of this crisis is that, despite all its problems, the euro has remained relatively stable both internally (inflation) and externally (exchange rate value). Financial markets may be concerned about some parts of the euro area, mainly in the south, but they still see the euro as a major currency in the world. However, the euro will only maintain this role if European governments can get the crisis under control. Whatever the ultimate conclusion of the drama, the experience has shown that Europe needs a much tighter form of economic governance if it wants to live up to the ambition of providing an alternative reserve currency. While a series of events has progressively deepened the European debt crisis, it is important to distinguish between sudden shocks and underlying fundamental problems in Europe's economic governance. Their interaction has been the specific flavor of this crisis.

Collignon reviews two opposing views of the European debt crisis. The fundamentalists believe the debt crisis was caused by the lack of discipline in sticking to the principles of "a sound and competitive macroeconomic base and solid public finance" (Weidmann 2011). Hence, the remedy should be to implement reforms and consolidate budgets, which would rebuild trust and confidence in financial markets (Issing 2009). The monetarists consider the European debt crisis was a liquidity crisis. A small local liquidity shock caused a sudden deterioration in a specific class of asset values, resulting in a global systemic financial crisis when the need for liquidity spilled over to banks that then got distressed because the deteriorating asset prices put their balance sheets into difficulties and reduced bank capital (Chacko et al. 2011). In this case, a crisis can be contained by a lender of last resort that provides the necessary liquidity and stops the crisis from turning into a default avalanche. Collignon finds that the solution of Europe's debt crisis would require a compromise between long-term fiscal consolidation and short-term

liquidity management. However, such a coherent policy approach will be unlikely to be forthcoming without a European economic government.

Collignon reviews the situation in Europe where its fiscal framework—the Stability and Growth Pact—failed to provide the fiscal discipline required to ensure financial stability. By May 2010 the crisis had attained systemic proportions. Collignon explains the creation of the European Financial Stability Facility (EFSF) where euro member states had to provide a credit-funded facility to lend to small economies that had lost access to capital markets. This was an institutional improvement for crisis management of the euro area, but for financial markets the EFSF offered too little and came too late. When financial crisis contagion spilled over into large member states, especially into Italy, it became obvious that the original EFSF bailout fund was insufficient and the European Council was forced to increase the fund's resources twice in July and October 2011.

Collignon discusses the euro area's economic fragility and looks at the handicaps of Europe's economic governance. He describes the structural problems faced by highly indebted member states and compares the opposing views of the fundamentalists and monetarists. One problem was the slowdown of capital productivity in southern member states as a consequence of falling and low interest rates in the 1990s and early 2000s. This caused them to lose their competitive advantage and they became more vulnerable to large shocks. He finds that these structural handicaps require deep reforms that will necessarily take time before they produce tangible results—provided the right measures are implemented. In the meantime, governments have a choice. They can either finance deficits until the reforms improve economic performance, or they can implement austerity measures that will reduce demand. Collignon argues that part of Europe's problem is caused by the fragility of its governance structures. The system worked well when the European Monetary Union was first introduced, but is no longer able to cope with the policy requirements in the crisis.

Collignon concludes that Europe's debt crisis is in reality a political crisis. The euro area economy is fully integrated by the fact that the European Central Bank alone sets monetary constraints on individual economies, but the political heterogeneities and different member state jurisdictions prevent economic policies that are consistent with the requirements of a single currency. Either Europe will move forward and deepen its political integration, or it will disappear as a global player and sink into irrelevance.

East Asia has been through two financial crises since the mid 1990s. The impact of the 1997–1998 Asian financial crisis was devastating, with Indonesia, the Republic of Korea, Malaysia, and Thailand severely affected as a result of not having enough foreign currency to meet their foreign currency obligations. All countries—except for Malaysia—had to enter into IMF-supervised programs, and were forced to undertake harsh policies under IMF conditionality. In the global financial crisis of 2007–2009, most economies in the region were able to manage the volatility arising from the rapid capital outflows following the closure of Lehman Brothers. However, some economies had severe dollar liquidity shortages

and had to enter into bilateral swap agreements with other economies to help them cope with the liquidity shortages.

In Chap. 8, Chalongphob Sussangkarn discusses national and regional mechanisms for the prevention and resolution of foreign exchange crises in East Asia. The first line of defense against foreign currency crises is to correctly understand the situation and adopt appropriate macroeconomic policies at the national level. Reviewing the factors behind the Asian financial crisis of 1997–1998, he notes that the risks from short-term foreign debts, and the need to have sufficient reserves to cover these debts, were not well understood. Apart from short-term foreign debts, other potential short-term foreign liabilities—such as in equity markets—also need to be backed up by sufficient foreign exchange reserves. This has implications for how the authorities should manage periods of rapid short-term capital inflows. If possible, the inflows should be absorbed into reserves, so that when capital flow reversals occur, there will be sufficient foreign exchange liquidity to manage the outflows. There are however limitations in the ability of the authorities to do this arising from the cost to the central bank's balance sheet and the fiscal implications of financing large increases in reserves to implement sterilization operations. Given this situation, he argues that regional and global mechanisms are also needed to provide foreign exchange support when necessary.

The chief regional liquidity support mechanism in East Asia is the Chiang Mai Initiative (CMI) that was established in 2000 under the auspices of the ASEAN+3 finance ministers, and was originally a network of bilateral swap arrangements among the ASEAN economies, plus the PRC, Japan, and the Republic of Korea. It was subsequently enlarged and multilateralized to become the Chiang Mai Initiative Multilateralization (CMIM) in 2010. Sussangkarn concludes that the CMIM is a crisis resolution mechanism rather than a crisis prevention mechanism. This is because of the way it is linked to an IMF program once a country's borrowing exceeds a certain percentage of its swap quota (30 % most recently). He argues that, if an economy requests a 90-day swap facility from the CMIM, it probably is only a temporary liquidity problem, but if it continues to have to ask for a renewal of the swap, then it is more likely that the problem is a more fundamental one, with the need for significant adjustments in macroeconomic policies. Therefore, Sussangkarn proposes that the link to an IMF program be changed so that it is based on an economy needing to roll over the swap with the CMIM more than a certain number of times. This change would enable the CMIM to become an integrated crisis prevention and resolution mechanism for East Asia, and be complementary with the IMF.

Apart from changing the way the CMIM is linked to the IMF, Sussangkarn makes a number of other suggestions for strengthening the regional mechanism, including expanding the size of the facility and permitting bilateral swaps as well, providing adequate support by member economies to the ASEAN+3 Macroeconomic Research Office (AMRO) surveillance group, and deepening regional surveillance and financial cooperation activities so that it becomes an important forum for discussions of the region's economic situation and a broad range of regional financial cooperation.

1.6 Linking Regional and Global Initiatives

The increasing occurrence of national, regional, and global financial crises, together with their rising costs and complexity, have increased calls for more effective regional and global monetary architecture. This is necessary particularly in light of volatile capital flow movements, which can quickly transmit crisis developments in individual countries to other countries around the world. Important areas for monetary cooperation include global financial safety nets (GFSN), international harmonization of supervision and regulation, crisis prevention, management, and resolution. In particular, the disruptive effects of volatile international capital flows call for a coordinated approach to global supervision and management of such risks.

In Chap. 9, Mario Lamberte and Peter Morgan review the current situation of regional and global monetary cooperation, focusing on financial safety nets, with a view toward developing recommendations for more effective cooperation, especially between the IMF and regional financial arrangements (RFAs). They argue that the experience of the global financial crisis, where financial shocks emanating from key countries led to contagion being transmitted around the world, shows the need for a large-scale and effective GFSN. A GFSN should have adequate resources to deal with multiple crises, it should be capable of rapid and flexible response, and it should not be encumbered by historical impediments such as the IMF stigma that would limit its acceptance by recipient countries. Such a GFSN should include the IMF and RFAs at a minimum, and Lamberte and Morgan argue that it is highly recommended to find ways to include central banks as providers of swap lines and multilateral banks as well.

The basic principles governing the cooperation of IMF and RFAs include rigorous and even-handed surveillance, respect of independence of each institution and regional specificities, ongoing collaboration as a way to build regional capacity for crisis prevention, open sharing of information and joint missions where necessary, specialization based on comparative advantage, consistency of lending conditions and conditionality, respect of the IMF as preferred creditor, subsidiarity, avoidance of moral hazard, and transparency.

Lamberte and Morgan argue that relations between the IMF and RFAs should be institutionalized. This should involve the IMF and other international finance institutions providing mechanisms for facilitating and receiving the collective representation of the regional institutions, possibly including RFAs as members in the IMF; and having RFAs establish their own mechanisms for dealing with the IMF, rather than simply being represented by their member countries. However, one of the biggest challenges is to institutionalize the process of policy consensus among member countries of an RFA.

Cooperation of surveillance activities needs to be institutionalized as well. RFAs should be included in IMF Article IV consultation missions, and a general structure for sharing information and assessments should be established. The key issue is how to bring their regional expertise to bear in the assessment process. Most likely, the solutions to this issue will need to be developed on a case-by-case basis.

Cooperation in financing activities presents the most challenges. A number of key developments need to be taken into account. First, as with surveillance, the relatively small size of most RFAs compared with likely funding demands in possible crisis scenarios means that action independent from the IMF is unlikely to be feasible. Second, the shift toward prequalification and precautionary lending programs by the IMF requires the RFAs to follow suit if they are to participate at this stage of the lending process. Both these trends will limit the scope for independent action by RFAs.

Lamberte and Morgan conclude that the development of an effective GFSN would require the involvement of central banks in developed economies to provide hard currency swap lines to it. The other requirement for an effective global financial safety net is to eliminate the IMF stigma, particularly in Asia and Latin America. Otherwise, economies in those regions will continue to use ad hoc arrangements, such as directly obtaining swap lines from individual central banks. Lamberte and Morgan reason that the IMF needs to implement governance reforms and thoroughly assess its previous surveillance and conditionality activities. In addition, RFAs should obtain sufficient resources to give them credibility in terms of the surveillance activity and the size of funding they can provide relative to the IMF. Expanded and more flexible capacity for additional SDR allocations need to be considered. Finally, they argue that a reduction in conditionality that requires a shift toward prequalification needs to be considered.

1.7 Conclusion

The global financial crisis of 2007–2009 and its aftermath have led to much debate about the shortcomings of the international monetary system and possible reforms. Nonetheless, reforms are likely to be piecemeal and slow. The US dollar is likely to remain the key international reserve currency for some time, in light of continued difficulties in the euro area, weak growth in Japan and the lack of capital account openness in the PRC and India. Only when the PRC's domestic financial reform makes an important breakthrough, can the internationalization of the yuan be able to make meaningful progress. Nor does there seem to be much near-term potential for a substantial expansion of the role of SDRs in the international monetary system.

Management of volatile capital flows in an era of ultra-low interest rates in many developed economies remains a thorny issue for emerging economies, and there is still no strong consensus on the subject. The IMF has relaxed its previous opposition to capital controls, but still tends to see capital flow management measures as a last resort rather than as an integral element of a comprehensive framework for economic and financial stability. It remains unclear whether substantial initiatives in this area will be developed by the IMF or under the G20 process. In the meantime, emerging economies may consider greater exchange rate

flexibility, as well as capital flow management measures that tend to reduce the difference between domestic and foreign after-tax rates of return.

The G20 countries recognize the need for development of regional and global financial safety nets, but progress remains slow in this area as well. The issue of the IMF stigma remains a potent deterrent to countries to borrow from the IMF, particularly in Asia and Latin America. In addition to increased flexibility in IMF lending programs, more substantial changes in its governance will be needed to overcome this problem. In the meantime, more efforts should be made to improve coordination between the IMF and various RFAs. In Asia, the CMIM has been substantially strengthened, but the link to IMF programs needs to be re-thought, precautionary lending programs should be expanded, possibly including bilateral swaps, and the resources of the AMRO should be increased further so that it can adequately carry out its surveillance mission.

There is potential for measures to promote greater currency coordination among Asian economies in order to reduce exchange rate risks associated with intra-regional trade, while allowing for greater flexibility of exchange rates with major economies outside the region in order to restrain the development of major trade imbalances. The key is to do so without imposing substantial constraints on monetary policy independence in individual economies. Adoption of an ACU may play a valuable role as a surveillance tool for measuring currency divergence. Asian economies may also consider how to reduce the divergence of the currency policy frameworks. However, the experience of the eurozone countries provides a cautionary note about the hazards of premature moves to tight currency cooperation, especially if other aspects of economic union are not in place at the same time.

In the aftermath of the global financial crisis, the G20 leaders' summit has become the key forum for developing policies to achieve global economic and financial stability. For the G20 to matter, it should be able to ensure that the systemically important countries such as the US adopt appropriate policies if and when their economic and financial situations become a threat to global stability. The experience with the G20 so far confirms that coordination through policy dialogue alone is unlikely to be effective. Growing interdependence implies that the externalities are becoming more numerous and more sizeable, and therefore enhances the case for policy coordination. Effective coordination means that individual countries would carry out policies that would benefit both their own economies and the rest of the world. This can be in their best interest due to externalities, but internalization is often opposed because it is perceived as a loss of sovereignty.

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