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**Working Paper**

## Reform of the international financial architecture: An Asian perspective

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## **ADB Working Paper Series**

### **Reform of the International Financial Architecture: An Asian Perspective**

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Masahiro Kawai has served as dean of ADBI since January 2007.

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**Abstract**

It has taken two crises—the Asian financial crisis of 1997-1998 and the global financial crisis of 2007-2009—for the international community to seriously focus on the reform of the international financial architecture for crisis prevention, management and resolution. Facing the global financial crisis, the international community has responded by making the G20 Summit the premier forum for international economic and financial cooperation, creating a potentially more powerful Financial Stability Board, and augmenting the financial resources of the IMF.

However, the international financial architecture remains inadequate for the needs of many emerging market economies. The effectiveness of IMF surveillance—particularly that of systemically important economies (such as the US, the UK and the Euro Area)—as well as its governance structure should be improved. International liquidity support should be made available when any country with sound economic and financial management is put into an externally driven crisis. International agreements should be reached on external (sovereign) debt restructuring, and on the cross-border resolution of insolvent, internationally active financial firms for fair burden sharing of losses between creditors and debtors, or among different national authorities.

A well-functioning regional financial architecture could complement and strengthen the international financial architecture. East Asian authorities should focus on: (i) the establishment of resilient national financial systems, including local-currency bond markets; (ii) integration of national financial markets to facilitate the mobilization of regional savings for regional investment (in infrastructure and SMEs); and (iii) enhancement of regional liquidity (Chiang Mai Initiative Multilateralization) and economic surveillance mechanisms. The region should also intensify regional exchange rate policy coordination to achieve sustained economic growth without creating macroeconomic and financial instability.

JEL Classification: F30, F32, F33, F34, F53, F55

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# 1. INTRODUCTION

During the 1990s and the early 2000s, there were at least nine major financial crises in emerging market economies,<sup>1</sup> primarily driven by capital account factors as opposed to current account problems. These crises were difficult to handle due to their speed, the extent of capital flow reversals, and associated contagion. Traumatized by the 1997–1998 crisis, Asian policymakers arrived at a consensus view that the then existing international financial architecture—the official mechanisms that facilitate global financial stability and the smooth flow of goods, services, and capital across countries, with the International Monetary Fund (IMF) at its core—was not effective in helping the crisis-affected economies manage and overcome the crisis, and that the IMF even exacerbated the severity of the crisis. As a result, many Asian policymakers and observers questioned the credibility of the IMF.

The Asian financial crisis heightened calls for the reform of the international financial architecture. The international community and international organizations—such as the IMF, the World Bank, the Organisation for Economic Co-operation and Development (OECD), and the Bank for International Settlements (BIS)—undertook efforts to reform the international financial architecture. These efforts included: the establishment of the Financial Stability Forum (FSF); the creation of a new Group of Twenty (G20) process for finance ministers and central bank governors; improvements of information transparency and disclosure; the adoption of international standards and codes; stronger financial regulation through the Basel Committee on Banking Supervision; the introduction of collective action clauses in new sovereign bond issues as part of private sector involvement; and reforms of IMF surveillance, liquidity support, conditionality, and governance. However, the overall reform was limited: for example, no significant reforms were made to contain the volatility and procyclicality of capital flows, to fully involve the private sector through sovereign debt restructuring mechanisms, or to substantially improve IMF governance.

The global financial crisis that began with the United States (US) subprime crisis in the summer of 2007 and exploded in the fall of 2008 following Lehman Brother's collapse is truly global in the sense that it affects not only the US and Europe—the source regions of the crisis—but also many other developed and emerging market economies that were dependent on either short-term capital inflows or exports to US and European markets. This crisis resurrected efforts to strengthen international financial architecture. The G20 process has been upgraded from a ministerial process to the leaders' process and is now considered as the “premier forum” for international economic cooperation (Leaders' Statement: The Pittsburgh Summit, 24–25 September, 2009). The FSF has been expanded to become the Financial Stability Board (FSB) with a greater mandate and a larger membership. And the IMF financial resources have been substantially augmented to assist countries affected by the global financial crisis. Given much larger resources, the IMF is expected to play a more effective role in crisis management with greater legitimacy. Hence, IMF governance reform has become even more critical as a means to solidify the organization's legitimacy.

Asian policymakers have been responding to the inadequacy of the global financial architecture through regional initiatives since the Asian financial crisis. In particular, ASEAN+3 economies (the 10 ASEAN members plus the People's Republic of China [PRC], Japan, and the Republic of Korea [hereafter Korea]) have forged regional cooperative mechanisms for financial stability backed by regional trade and investment integration. These attempts—including the Chiang Mai Initiative (CMI), the Economic Review and Policy Dialogue (ERPD), and the Asian Bond Markets Initiative (ABMI)—are intended to enhance macroeconomic management capacity, national financial systems, and the ability to provide

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<sup>1</sup> These economies included: Mexico (February 1995), Argentina (April 1995; March 2000–January 2003), Thailand (August 1997), Indonesia (November 1997–January 1998–August 1998–February 2000), Korea (December 1997), Russia (August 1998), Brazil (December 1998), and Turkey (December 1999–February 2002). See Laeven and Valencia (2008) for a survey of banking crises since the 1970s.

regional liquidity support. Although much progress was made, the global financial crisis has provided another impetus to further strengthen the regional financial architecture in East Asia.

The paper is organized as follows. Section 2 summarizes the lessons learned from the Asian financial crisis of 1997–1998 and the global financial crisis of 2007–2009. Section 3 reviews efforts and progress being made to reform the global financial architecture to enhance mechanisms and measures for crisis prevention, management, and resolution. Section 4 assesses whether the on-going efforts at the regional level—among the ASEAN+3 finance ministers—have sufficiently enhanced East Asia’s resilience to capital account crises, and proposes new directions of reform. Section 5 concludes the paper, suggesting that the international financial architecture remains inadequate for East Asian purposes, and that further significant reforms are needed.

## **2. A NEED FOR A NEW INTERNATIONAL FINANCIAL ARCHITECTURE**

### **2.1 Lessons from the Asian Financial Crisis of 1997–1998**

The Asian financial crisis of 1997–98 was triggered by massive reversals of capital flows and contagion. Though deeper, structural causes of crises vary, there were common factors across crisis-affected countries; domestic financial firms that were inadequately regulated and supervised over-borrowed from abroad and over-extended loans to domestic corporations and projects of dubious credit quality. Furthermore, a currency crisis that initially appeared to be benign evolved into a full-blown economic crisis due to the mutually reinforcing impacts of currency depreciation, financial sector deterioration, and corporate sector distress. Essentially the crisis was the result of interactions between the forces of financial globalization and domestic structural weaknesses.<sup>2</sup>

#### **2.1.1 Root Causes: Financial Globalization and Domestic Vulnerabilities**

The crisis-affected countries in Asia had liberalized controls over their domestic financial systems and international capital flows and, as a result, had been integrated—at least partially if not wholly—with global capital markets by the first half of the 1990s. In the several years leading up to the crisis, they had received large inflows of capital to the financial and corporate sectors, particularly in the form of foreign currency-denominated, short-term capital, which was not hedged. As a result, the ratios of short-term external debt to foreign exchange reserves had risen to levels greater than unity. When market perceptions changed rapidly in 1997, these economies saw rapid outflows of capital and the consequent large downward pressures on currencies. The currency crisis was triggered by the sudden reversal of capital flows, which is why the crisis was often called the “capital account crisis.”<sup>3</sup>

Regional contagion of the crisis was spectacular. The impact of the Thai baht devaluation quickly spread to Malaysia, Indonesia, the Philippines, and eventually Korea within a matter of a few months. The currencies in these economies depreciated drastically in short order. At a later stage, Hong Kong, China was also affected, but the authorities managed successfully to contain its impact using unconventional policy measures.

The affected countries had domestic structural weaknesses. A part of foreign capital was intermediated by domestic banks and nonbank financial firms that extended loans to domestic sectors including real estate and construction, while a part of capital found its way directly to domestic corporations. Investment in real estate and other assets contributed to

<sup>2</sup> See the twin studies by the World Bank (1998, 2000).

<sup>3</sup> See Yoshitomi and Shirai (2000); Kawai, Newfarmer, and Schmukler (2005); and Ghosh et al. (2002).

asset price bubbles in many economies, which left financial firms and corporate borrowers with serious balance sheet problems when the bubble ultimately burst. In this way, banks and nonbanks that intermediated foreign capital to domestic sectors were exposed to the “double mismatch” problem (Goldstein 1998)—i.e., currency and maturity mismatches—by borrowing short in foreign currency and lending long in domestic currency. Domestic corporations that had increased their leverage were also exposed to interest and exchange rate shocks. Steep exchange rate depreciation, high and rising interest rates and tight budgets—brought about by market forces and policy responses prescribed by the IMF—aggravated financial and corporate sector distress and led to a sharp contraction of economic activity in 1998.

### 2.1.2 Lessons

There are at least two important lessons to draw from the Asian financial crisis. First, on the domestic front, if a country is to be increasingly integrated with international capital markets, its policymakers must have the capacity to prudently manage the forces of financial globalization in order to deal with any of its undesirable impacts. Until the crisis, the implications of the scope and magnitude of short-term capital flows had not been fully understood by international investors, borrowing country policymakers, or international organizations. More fundamentally, there was a lack of concern over the volatile and procyclical nature of capital flows and the need to monitor and manage easily reversible capital flows.

Emerging market economies need to strengthen their domestic economic underpinnings—by creating effective frameworks for achieving macroeconomic and financial stability—in order to make them more resilient to domestic and external shocks. This task requires the enhanced capacity of policymakers to respond to various shocks, through macroeconomic policy tools, as well as effective frameworks of financial-sector regulation and supervision. With a robust domestic economic system, a country could prevent a crisis or mitigate its impact on the economy. The authorities in the region need to:

- put in place sound macroeconomic policy, including monetary, fiscal, exchange rate, and debt management policies to avoid asset price bubbles, large current account deficits, high leverage, and the double mismatches;
- strengthen financial-sector regulation and supervision to help improve asset-liability and risk management capacity on the part of banks and nonbank financial firms; and
- develop domestic market infrastructure for financial and corporate sectors—including corporate governance, accounting, auditing, and information disclosure—to make the fundamental structure of the economy resilient to shocks.

Second, on the international front, the global financial architecture should be reformed. A major thrust of the reform philosophy was that the international financial market contained systemic problems, which could threaten the stability and health of many emerging market economies that were being integrated with, and so exposed to, global financial markets. The solution would require concerted efforts by both developed and emerging market economies: to make international capital flows from developed countries less procyclical and more stable; to improve economic surveillance of an economy so as to detect early signs of vulnerabilities and risks that could lead to a financial crisis; to ensure timely availability of adequate international liquidity at the onset of a crisis; and to encourage the IMF to formulate appropriate policy conditionality, associated with crisis lending, reflecting the specific situations of the economy in crisis.

To summarize, the Asian financial crisis demonstrated the importance of establishing both a more resilient domestic economic and financial system and a better functioning global financial system as key to crisis prevention, management, and resolution.



## 2.2 Lessons from the Global Financial Crisis of 2007–2009

### 2.2.1 Severity of the Impact of the Global Financial Crisis

The US subprime mortgage crisis that emerged in the summer of 2007 spread to the entire US financial system and other industrialized country financial markets. Many European countries also had their own financial vulnerabilities.<sup>4</sup> With the collapse of Lehman Brothers in September 2008, the crisis in the US and Europe moved quickly from the financial sector to the real economy. It became a full-blown global financial and economic crisis. Real GDP contracted sharply in the US, Europe, and other economies affected by sudden stops—or even reversals—of capital flows and sharp declines in exports.

This crisis is different from other financial crises observed over the last several decades, not only in its breadth and magnitude but also in its origin. The crisis is global, affecting almost all countries in the world, not just a few, with devastating impact. The epicenter of this crisis was not a peripheral country, but the US, which is the largest and most central economy in the world, home to the most dominant global key currency—the dollar—and the world's most sophisticated and developed financial system.

### 2.2.2 Root Causes: Flaws in Financial Regulation and Monetary Policymaking in the US

The root cause of the global financial crisis traces back to the buildup of excessive optimism, nurtured by the “great moderation”—a long period of world-wide high, sustained economic growth, low real interest rates and subdued volatility of financial prices—as well as the flood of liquidity, which chased assets and thereby depressed yields. With these benign macroeconomic and financial environments, investors around the world were prompted to search for yield and so underestimated and underpriced risks involved in investments such as complex, structured products. The IMF (2009) summarized the initial lessons of the global financial crisis in three dimensions: lack of effective financial regulation and supervision; failure of monetary policy to address the buildup of systemic risk; and a weak global financial architecture.

First, there were regulatory and supervisory deficiencies; national financial regulation and supervision failed to see the large buildup and concentration of systemic risks in the US (and the United Kingdom [UK] and several other European countries). The scope of regulation and supervision was narrowly focused on insured deposit-taking firms and did not adequately cover all financial activities that posed economy-wide risks. The “shadow banking” system—comprising investment banks, mortgage-brokers and originators, special investment vehicles, insurance companies writing credit default swaps, and other private asset pools—grew, as it had long been lightly regulated by a patchwork of agencies and generally not supervised prudentially.<sup>5</sup> The financial supervisors failed to recognize

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<sup>4</sup> In addition to investing in “toxic” assets created by US financial firms, Western European countries also had exposure to inflated real estate and Eastern European economies.

<sup>5</sup> US regulators could not detect the overall growth of “shadow banking system” due to the highly fragmented nature of the US regulatory and supervisory framework; bank supervision was divided among five federal agencies and the states; insurance companies were supervised at the state level; investment banks were supervised by the Securities and Exchange Commission (SEC); and derivatives trading in organized exchanges were supervised by the Commodity Futures Trading Commission while over-the-counter derivatives were under no agency supervision.

Basel I encouraged the creation of off balance sheet special-purpose vehicles that contributed to the subprime crisis; the SEC lifted the net capital rule for investment banks, enabling them to double or even triple their leverage; credit rating agencies employed practices that were fraught with conflicts of interest; and mortgage banks, Fannie Mae and Freddie Mac employed lax lending practices.

interconnections and links across firms, sectors, and markets due to the lack of a more comprehensive macroprudential approach.<sup>6</sup>

Second, the US Federal Reserve underestimated the seriousness of financial imbalances created by excess liquidity, housing price bubbles, and the high leverage and wholesale funding of, and interconnections between, financial firms.<sup>7</sup> With regard to the role of US monetary policy behind the subprime and overall financial crisis, Fed Chairman Ben Bernanke (2005) argued that the savings glut in Asia overwhelmed the efforts of central banks in the US and elsewhere to raise policy interest rates,<sup>8</sup> suggesting that the global payments imbalance, rather than US monetary policy, was the cause of the subprime crisis. In contrast, Taylor (2009) argued that the Fed policies brought excessive liquidity and low interest rates to the US, and concluded that the federal funds rate was kept too low for too long, fueling the housing boom and other economic imbalances. There is a consensus that the Fed's tardiness in raising short-term rates fueled the bubble.

Third, there were deficiencies in the global financial architecture. Global organizations—like the IMF, OECD, BIS, and FSF—were not effective in macro-financial surveillance of systemically important economies. That is, they failed to detect the buildup of systemic risk in the US, the UK, and the eurozone, send clear warnings to policymakers, and provide policy advice on measures to reduce the risk.<sup>9</sup> These organizations clearly underestimated the looming risk in the shadow banking system, interconnections across financial firms, markets, and countries and global macroeconomic-financial links.<sup>10</sup>

The crisis also revealed the weakness of fragmented international arrangements for regulation, supervision, and resolution of internationally active, large, and complex financial firms. The problem became particularly acute when such firms began to fail. Authorities were often quick to ring-fence assets of failed firms in their jurisdictions because of the absence of clear international rules governing crisis management and resolution and burden sharing of losses in the event of failures of large, complex financial firms with cross-border operations.<sup>11</sup>

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<sup>6</sup> Supervisors tend to focus only on their own limited responsibilities, overlooking the larger problem. Shin (2009) pointed out a fallacy of aggregation: “mis-educated” supervisors and examiners were focused on individual financial firms, without regard to the impact on the system.

<sup>7</sup> The Fed may have had the expectation that prudential regulation would control any such financial imbalances and buildup of systemic risk, and that even if the asset price boom were to collapse, the impacts on the financial system and the economy could be mitigated by lower interest rates.

<sup>8</sup> Alan Greenspan (2005) described the surprisingly low interest rates on long-term government bonds in the face of monetary policy tightening as a “conundrum.” He attributed it partly to economic globalization. Bernanke suggested that the world was suffering from low time preference, that is, “global savings glut.”

<sup>9</sup> The IMF (2009) admits that “official warnings both within and outside the Fund were insufficiently specific, detailed, or dire to gain traction with policymakers.”

<sup>10</sup> In contrast, there was considerable discussion of “global imbalances” during 2002–2007. The IMF in particular warned repeatedly that global imbalances posed a serious risk to global financial stability. It made efforts to obtain specific policy commitments from major economies—particularly the US and the PRC—through the newly established Multilateral Consultation process, but met only limited success. The IMF and the US focused on the need for the PRC to revalue the currency, without the US pursuing policies to contain overconsumption, an underlying factor behind the huge current account deficits. The global imbalance discussion may have diverted policymakers' attention away from US domestic financial imbalances and buildup of systemic risk toward the possible dollar collapse.

<sup>11</sup> For example, under “domestic depositor preference” and the “single-entity approach” to resolution, the US Federal Deposit Insurance Corporation as receiver is required to seek control over all foreign assets of a failed US bank. Facing an imminent collapse of Icelandic bank branches under the authority of Icelandic supervisors, UK supervisors decided to ring-fence Icelandic bank assets hoping to assure that liabilities to UK banks would be met. The German authorities froze Lehman Brothers' assets to assure the availability of cash to satisfy depositors before the funds were attached to the parent under US bankruptcy proceedings.

### 2.2.3 Lessons

Two important lessons can be extracted from the global financial crisis, on the national front as well as the international front. First, at the national level, a country clearly needs to establish the capacity to prevent a financial crisis. This would require prudent macroeconomic policy and effective financial regulation and supervision. It is now well understood that if prudential supervisory action cannot prevent a buildup of systemic risk, then the central bank, as a macro-financial overseer, should react to credit booms, rising leverage, sharp asset price increases, and the buildup of financial vulnerabilities through tighter monetary policy. Each country should establish an effective, powerful “systemic stability regulator” that is in charge of crisis prevention, management and resolution (Kawai and Pomerleano 2009).

Crisis management and resolution at the national level would require well-functioning mechanisms for resolving bad debt and insolvent financial firms. A coordinated approach is needed to resolve both bank nonperforming loans (NPLs) and corporate or household debt. A clear legal and operational framework is needed to enable the orderly and timely exit of insolvent financial firms, including closures (liquidation), mergers with healthier institutions, and temporary nationalization. These mechanisms should be designed with the view that the longer resolution takes, the larger the eventual economic costs.

Second, at the international level, further reform of the global financial architecture is needed, including the role of the IMF and the framework of global financial regulation and supervision. Global macroeconomic and financial stability is essential to sustained growth of world trade, international capital flows, and economic activity, where the IMF has a critical role to play. However, the IMF neither identified macro-financial risks in the US (and key European countries) and the implications of the subprime crisis for global finance, trade and capital flows, nor urged the US (and European countries) to take necessary policy actions. The IMF has now acquired extraordinarily large financial resources (tripling in size from US\$250 billion to US\$750 billion) due to the global financial crisis it did not predict. The IMF faces the challenge of how to improve the effectiveness of its macro-financial surveillance.

A clearly defined international framework should be introduced to strengthen global supervision and regulation of systemically important financial firms so that their cross-border activities can be adequately monitored, regulated, and supervised. Also, given that the existing home country based resolution arrangements are unsustainable,<sup>12</sup> a new international regime is needed to resolve nonviable, internationally active financial firms in an orderly manner. Ideally, a new global financial regulatory and supervisory body—that could be called the World Financial Organization (Eichengreen 2009a, 2009b)—should be created to facilitate international harmonization of supervision and regulation as well as crisis prevention, management, and resolution.

## 2.3 Crisis Prevention, Management, and Resolution

Valuable lessons can be found from examining some policy mistakes—such as the failure to avoid “double mismatches,” to contain asset price bubbles, and to prevent excessive risk-taking by financial firms—as well as how the global financial architecture proved to be inadequate for crisis prevention, management, and resolution. The most important lesson is that “it is better to prevent a crisis than cure it.” However, when a crisis breaks out, efficient crisis management and resolution become crucial. The national, global, and regional

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<sup>12</sup> Hüpkens (2009) found that the cross-border framework for managing a crisis is weak and that the winding-down of a large cross-border financial firm is complex. The resolution is hampered by the asymmetries of exposures across jurisdictions that create a risk of asset ring-fencing and discourage the sharing of information and collaboration; multiple (and conflicting) insolvency processes across jurisdictions; resolution tools that do not work when markets are not functioning; and practical constraints such as technical competence across jurisdictions and different time zones.

dimensions of crisis prevention, management, and resolution are summarized in Table 1 (the regional aspect will be explained later in Section 4).<sup>13</sup>

### 2.3.1 Crisis Prevention

The first key effort should be to strengthen crisis prevention mechanisms, recognizing that crisis prevention is the first best solution. The major preventive mechanisms are: (i) implementation of sound macroeconomic policies (monetary, fiscal, exchange rate, and public debt management policies); (ii) establishment of effective financial regulation and supervision that monitors and acts on economy-wide systemic risk; and (iii) maintenance of sustainable current account and capital account positions.

The implementation of sound macroeconomic policies is a fundamental requirement for crisis prevention. Monetary and fiscal policies should be used to achieve low inflation, and sustainable growth—without boom-and-bust cycles. They should also be used, together with macroprudential policies, to achieve stable asset prices and sound financial intermediation. For this purpose, national policymakers must strengthen both macro-financial surveillance and monetary and prudential policy coordination to achieve price stability and financial stability. At the global level, the IMF should enhance the effectiveness of surveillance by elevating its ability to identify economic and financial vulnerabilities particularly in systemically important economies—like the US, the UK, and the eurozone—as they affect the global economy. The IMF must also obtain tools to compel the respective authorities to reduce such identified vulnerabilities.

Establishing an effective framework of financial sector regulation and supervision is the second requirement for crisis prevention. The regulator must go beyond the traditional bottom-up, microprudential supervision that addresses the soundness of individual financial firms, and take a top-down, macroprudential approach that recognizes interconnections and links across financial firms, sectors, and markets and considers system-wide risks that could threaten the health and stability of the whole financial sector and the overall economy. Adopting financial regulations that reduce the procyclicality of credit growth and capital inflows is an important challenge. For example, countercyclical elements can be included in the regulation of financial intermediation and capital flows (Griffith-Jones and Ocampo 2003; Ocampo and Chiappe 2003). At the global level, the monitoring and supervision of large, internationally active financial firms should be improved, as should the regulation of rating agencies, hedge funds, highly complex structured products, derivatives, and remuneration.

The international community has been encouraging enhanced information transparency for emerging economies and markets. Lack of accurate information on the economies and markets in question can create instability in investor perceptions and price and transaction volatility by amplifying exuberance, disappointment, and herd behavior. Thus, each country must improve the transparency of information on macroeconomic development, and financial sector conditions.

Similarly, the global financial crisis underscored the need to enhance the transparency of financial instruments and markets. The opacity of collateralized debt obligations, the off-balance activities of banks, and credit default swaps offered by banks and nonbank financial firms were significant factors behind the crisis. Enhanced information disclosure of key market instruments and major activities of market players—such as banks, nonbank financial firms, mutual funds and alternative investment pools (such as hedge funds)—is clearly necessary.<sup>14</sup>

<sup>13</sup> This is an attempt to extend the author's earlier studies (Kawai 2002; and Kawai and Rana 2008) in order to capture the early lessons from the global financial crisis.

<sup>14</sup> See De Brouwer (2001) for the role of hedge funds during the Asian financial crisis.

**Table 1: Summary of Policy Lessons from the Asian and Global Financial Crises**

Objective	National Measures	Global Measures	Regional Measures
<b>Preventing or reducing the risk of systemic crises</b>	<b><i>Establish effective financial regulation &amp; supervision to monitor and act on economy-wide systemic risk</i></b>		
	<ul style="list-style-type: none"> <li>Establish a national systemic stability regulator or council in charge of containing systemic risk</li> <li>Improve information transparency and disclosure in financial &amp; corporate sectors</li> <li>Strengthen macroprudential supervision with focus on consolidated supervision of systemically important institutions</li> <li>Improve monitoring of household and corporate sectors</li> <li>Reduce procyclicality of regulation</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen capacity, resources and effectiveness of FSB to promote global systemic stability</li> <li>Support implementation of international standards and codes, and best-practice corporate governance</li> <li>Agree on regulations over rating agencies, hedge funds, remuneration, etc</li> </ul>	<ul style="list-style-type: none"> <li>Establish a regional systemic stability council, such as the European Systemic Risk Board and the proposed Asian Financial Stability Dialogue</li> <li>Strengthen regional monitoring of financial markets</li> <li>Develop regional early warning systems</li> </ul>
	<b><i>Adopt sound macroeconomic management (monetary, fiscal, exchange rate, and public debt)</i></b>		
	<ul style="list-style-type: none"> <li>Pursue non-inflationary monetary policy</li> <li>Maintain sound fiscal policy and manage public debt prudently</li> <li>Use monetary policy to head off excesses, booms and asset price bubbles</li> <li>Avoid boom-and-bust business cycles</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen IMF surveillance and early warning systems, with focus on systemically important economies</li> <li>Utilize private-sector monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen regional policy dialogue and monitoring</li> <li>Develop regional early warning system</li> <li>Promote regional exchange rate policy coordination</li> </ul>
<b>Managing crises</b>	<b><i>Maintain sustainable current account and capital account positions</i></b>		
	<ul style="list-style-type: none"> <li>Avoid excessive currency overvaluation</li> <li>Avoid persistent current account deficits and heavy reliance on S/T capital inflows</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate policies to avoid unsustainable global payments imbalances</li> </ul>	<ul style="list-style-type: none"> <li>Expand regional demand where savings rates are exceptionally high</li> </ul>
	<b><i>Provide timely liquidity of sufficient magnitude</i></b>		
	<ul style="list-style-type: none"> <li>Formulate consistent policy packages including liquidity support with a view to reducing moral hazard problems</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen IMF liquidity support, including the new Flexible Credit Line</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen a regional liquidity support facility to contain crises and contagion</li> </ul>
<b>Resolving systemic crises</b>	<b><i>Support the financial sector within a consistent framework</i></b>		
	<ul style="list-style-type: none"> <li>Extend guarantees of bank obligations</li> <li>Conduct stress tests to identify losses and capital needs of financial institutions</li> <li>Establish a consistent framework for NPL removal and recapitalization</li> </ul>	<ul style="list-style-type: none"> <li>Establish a common international rule for public sector interventions in the distressed financial system</li> <li>Avoid financial protectionism</li> </ul>	<ul style="list-style-type: none"> <li>Harmonize national interventions in the financial system—such as bank deposit guarantees—at the regional level</li> </ul>
	<b><i>Adopt appropriate macroeconomic policies to mitigate the adverse feedback loop between financial and real sectors</i></b>		
	<ul style="list-style-type: none"> <li>Adopt an appropriate monetary and fiscal policy mix contingent on the specific conditions of the economy</li> <li>Be prepared for extraordinary policies</li> </ul>	<ul style="list-style-type: none"> <li>Streamline IMF conditionality</li> <li>Design international fiscal support programs for fiscally constrained economies</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen regional capacity to formulate conditionality</li> <li>Create regional fiscal support systems</li> </ul>
<b>Resolving systemic crises</b>	<b><i>Create frameworks for resolving financial firms' impaired assets and corporate and household debt</i></b>		
	<ul style="list-style-type: none"> <li>Establish frameworks for resolving bad assets of financial institutions</li> <li>Introduce legal and out-of-court procedures for corporate debt workouts</li> </ul>	<ul style="list-style-type: none"> <li>Harmonize national frameworks for resolving bad assets of financial institutions</li> <li>Provide international support</li> </ul>	<ul style="list-style-type: none"> <li>Finance regional programs to help accelerate bank and corporate restructuring</li> </ul>
	<b><i>Introduce domestic rules for exit of nonviable financial firms</i></b>		
	<ul style="list-style-type: none"> <li>Establish clear legal and formal procedures for exits of insolvent financial firms</li> </ul>	<ul style="list-style-type: none"> <li>Harmonize national resolution regimes for nonviable financial firms</li> </ul>	<ul style="list-style-type: none"> <li>Harmonize insolvency procedures by adopting good practices</li> </ul>
<b>Resolving systemic crises</b>	<b><i>Establish international rules for sovereign debt restructuring and insolvent financial firm resolution</i></b>		
	<ul style="list-style-type: none"> <li>Strengthen national procedures for debt workout and insolvencies of nonviable, internationally active financial firms</li> </ul>	<ul style="list-style-type: none"> <li>Introduce international rules for cross-border debt workout and insolvencies</li> </ul>	<ul style="list-style-type: none"> <li>Develop regional rules for cross-border debt workout and insolvencies</li> </ul>
	<b><i>Provide fiscal support to help emerging and developing economies resolve crises</i></b>		
	<ul style="list-style-type: none"> <li>Maintain fiscal space to prepare for crisis response and resolution</li> </ul>	<ul style="list-style-type: none"> <li>Provide fiscal support for crisis response and resolution</li> </ul>	<ul style="list-style-type: none"> <li>Finance regional programs to assist crisis resolution</li> </ul>

Source: Author.

### 2.3.2 Crisis Management

Once a financial crisis breaks out, the authorities must limit the magnitude and duration of the crisis. Crisis management tools include: (i) provision of timely and adequate liquidity in domestic and international currency; (ii) support of ailing financial firms through guarantees, stress tests, NPL removal, and recapitalization; and (iii) adoption of appropriate macroeconomic policies to mitigate the adverse feedback loop between the financial sector and the real economy. An important challenge is how to prevent such policy measures from creating moral hazard problems.

At the time of a currency crisis or contagion in emerging markets—particularly when resulting from irrational herd behavior—timely provision of large-scale international liquidity of sufficient magnitude is essential to prevent the country from slipping into a serious contraction. When a crisis is driven by external factors or herd behavior, international liquidity support should be provided automatically to such a country without conditionality (Sachs 2008). There is a call for making the IMF the international lender of last resort (Fischer 1999) particularly for countries without adequate foreign exchange reserves or reliable credit lines. However, the IMF developed-country members reject this view because of potentially large resource needs and possible moral hazard problems. If automatic, broad-based liquidity support without conditions is problematic, then the required policy conditionality—including macroeconomic (monetary and fiscal) and structural policies—should be minimized. Details of such policy adjustment should be based on the country's particular conditions.

The financial authority needs to respond to a financial crisis with a set of comprehensive policy measures. These could include provision of liquidity to troubled financial firms, guarantees of deposits and interbank claims, a rigorous assessment of major firms' balance sheets through stress tests, removal of NPLs from their balance sheets, recapitalization of viable firms, and consigning nonviable firms for orderly resolution. Prompt intervention is critical when the crisis deepens rapidly. After recapitalization, owners of financial firms should have sufficient incentives to restructure—through for example a write-down—their bad assets held against viable borrowers.

When internationally active financial firms become bankrupt, host country authorities often are tempted to manage the firms' assets and liabilities within their regulatory jurisdictions, in the absence of international standards for cross-border cooperation on crisis management. This often creates international conflict as different countries' authorities tend to pursue their respective national interests.<sup>15</sup> A binding international agreement on crisis management is urgently needed when large, complex financial firms with cross-border businesses fail.

### 2.3.3 Crisis Resolution

Once a currency crisis evolves into a full-blown economic crisis, with systemic damages to the banking and corporate sectors, it is vital to quickly resolve the problem. Crisis resolution measures should include: (i) use of mechanisms for resolving financial firms' impaired assets and corporate and household debt; (ii) use of well-functioning domestic insolvency procedures for nonviable financial firms; and (iii) use of international rules for the restructuring of external (sovereign) debt as well as the resolution of nonviable, internationally active financial firms, including clear burden sharing mechanisms among private investors and debtors and among different countries' authorities, respectively.

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<sup>15</sup> A report by the Financial Stability Forum (2008) provides principles for cross-border cooperation on crisis management. But the recommendations are based on voluntary cooperation and do not offer any roadmap for compelling action or implementation. It is useful to identify such principles, but it is unrealistic to assume that countries will follow voluntary principles and reject self-interest in financial crises. Ultimately, in the absence of an internationally binding agreement, self-interest will force the countries to not adopt the principles in a real crisis.

Creating domestic mechanisms for resolving impaired financial-firm assets and corporate and household liabilities is the first priority. Resolution of nonviable financial firms (by way of liquidation, closure, nationalization, merger, and acquisition) and revitalization of viable firms (through recapitalization, carving out of NPLs, and their transfer to asset management companies) are two key strategies. This must be accompanied by frameworks to facilitate early corporate or household debt restructuring: creation of enabling environments by eliminating legal and tax impediments to corporate restructuring; strengthening of court-based bankruptcy, reorganization and foreclosure laws, and legal protection of creditor rights; and establishment of voluntary, out-of-court frameworks for corporate restructuring based on the “London rules.”

Establishing international rules for the orderly restructuring of external debt is necessary. The importance of such agreements was exemplified by the restructuring of external debt owed to Korean banks, which was agreed to in December 2007, effectively stabilizing the country’s financial markets. As a result of the global financial crisis, small European peripheral countries—such as Iceland and the Baltic states—assumed huge external debt obligations, which would require international restructuring in order to allow these countries to return to the path of debt sustainability with growth. The purpose of international debt workout is to promote debtor-creditor negotiations so as to reach restructuring agreements that allow rollovers, extension of maturities, and possibly debt and/or interest reductions—while suspending payments on external debt through a “stand still” arrangement. A “stand still” is often needed to protect the rights of all creditors in an equitable way during negotiations; otherwise assets can drain out of the country in a disorderly way. Such rules could lead to fair burden sharing of losses between creditors and debtors (or national authorities if a large portion of debts are socialized).

In addition, internationally agreed resolution rules for failed financial firms with cross-border operations would allow the orderly exit of such firms and, as a result, could reduce the effects of uncertainty on trading, custodial relationships, and confidence in the market and avoid national ring-fencing of the financial industry. Such rules could force seemingly “too big to fail” or “too interconnected to fail” financial firms to exit and, thus, help minimize the risk of moral hazard by requiring both creditors and debtors to share the burden of losses.

Crisis resolution can be costly as the government often has to intervene in the financial and corporate sectors by providing guarantees and recapitalization. Fiscally constrained emerging market economies may have to seek external financial assistance in order to secure needed fiscal resources. Such fiscal needs can be potentially huge if the government has to increase spending in response to a deepening crisis. The international community—including the World Bank, regional development banks, and bilateral donor countries—needs to help a crisis-affected country mitigate the adverse real-sector impact of a crisis and restructure its financial and corporate sectors.

### **3. PROGRESS ON THE REFORM OF THE INTERNATIONAL FINANCIAL ARCHITECTURE**

Intensive debates on the reform of the international financial architecture took place in the aftermath of the Asian financial crisis (see Eichengreen 1999; Kenen 2001), and led to limited progress on reforms. Such progress includes: strengthening the international framework through the creation of such forums as the G20 and the FSF; enhancing information transparency and promoting best practices; improving financial regulation through the reform of the Basel Capital Accord; introducing collective action clauses in new sovereign issues, and implementing some reforms of IMF operations. Nonetheless, these reforms were largely inadequate and incomplete, with major reforms yet to be undertaken in such areas as private sector involvement for sovereign debt restructuring, the regulation of

hedge funds and capital flows, the provision of international liquidity support, and IMF governance.

While the momentum from earlier discussions faded away in the early 2000s, the eruption of the global financial crisis of 2007–09 generated renewed interest in international financial architecture reform. Now, the institutional set-up has been further strengthened, plans to tighten financial market regulation and supervision have been proposed, and more efforts to improve IMF governance are being made. Although it is too early to fully assess the effectiveness of such efforts, some preliminary evaluations are made below.

### **3.1 Standards and Codes and Information Transparency**

#### **3.1.1 Standards and Codes**

The international community has focused on the importance of an internationally recognized set of standards and codes of best practices in policymaking, in areas that directly benefit macroeconomic policymaking and in the functioning of financial markets.<sup>16</sup> The adoption of international standards and codes is expected to assist countries in strengthening their economic institutions, and inform market participants of recent key developments—through public disclosure of IMF Article IV consultation papers, IMF-World Bank Financial Sector Assessment Programs (FSAPs), and World Bank country assistance strategies.

The IMF, World Bank, OECD, International Organization of Securities Commissions (IOSCO), and BIS have established international standards in 12 areas, which are broadly categorized into three groups: (i) macroeconomic policy transparency, (ii) financial sector regulation and supervision, and (iii) financial market integrity. Standards in macroeconomic policy transparency include data dissemination, fiscal transparency, and monetary and financial policy transparency. Standards in financial regulation and supervision cover five areas: banking supervision, securities, insurance, payments systems, and anti-money laundering and combating the financing of terrorism. Standards for financial market integrity include corporate governance, accounting, auditing, and insolvency and creditor rights.

At the request of a member country, that country's observance—and implementation—of standards in each of the 12 areas is assessed by the IMF and the World Bank, and the results of these assessments are summarized in a Report on the Observance of Standards and Codes (ROSCs). Publication of these assessments by member countries is voluntary, although the IMF and World Bank do encourage their publication. As of February 2008, nearly three-fourths of its 185 member countries had completed one or more ROSC modules, of which 76% had been published (Kawai and Rana 2008).

#### **3.1.2 Information Transparency**

Data dissemination standards can enhance the availability of timely and comprehensive statistics, and so contribute to the design of sound macroeconomic policies. The IMF has taken several steps to help enhance information transparency and openness—including the establishment and strengthening of data dissemination standards—to help member country policymakers prevent future crises and diminish the effect of those that occur.

The standards for data dissemination consist of two tiers, the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS). The SDDS was established in 1996 to guide emerging market economies that have, or might seek, access to international capital markets, while the GDDS was established in 1997 to help countries provide more reliable data. Both are voluntary, but once a country subscribes to the SDDS, observance of the standard becomes mandatory. Countries must also agree to post information about their data dissemination practices on the IMF's external website on

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<sup>16</sup> Standards and codes refer to provisions relating to the institutional environment or “rules of the game” within which economic and financial policies are devised and implemented.



Dissemination Standards Bulletin Board (DSBB), and establish an Internet site containing the actual data, called a National Summary Data Page, to which the DSBB is linked. The IMF notes that approximately 81% of its membership participates in the new data initiatives.

Although an increasing volume of information has been made publicly available, this has not prevented a buildup of vulnerabilities and systemic risk within a country as investors have often neglected such information in times of market exuberance. In this sense information transparency in and of itself is not a panacea, but the availability of data and information, as long as investors have the capacity to integrate them in decision making, is clearly useful in guiding often turbulent markets towards economic fundamentals.

## **3.2 Creating a Robust and Resilient Financial System**

### **3.2.1 Financial System Soundness**

The presence of a sound financial system—comprising banks, security houses, securities exchanges, pension funds, insurers, and alternative investment vehicles—is essential to support sustainable economic growth and development, and the role of the central bank and national supervisors/regulators is critical in promoting financial stability.

The IMF helps promote financial system soundness through its ongoing bilateral and multilateral surveillance, the FSAP, and the provision of technical assistance.<sup>17</sup> In 1999 the IMF and the World Bank jointly launched the FSAP, as a means to provide member countries with a comprehensive evaluation of their financial systems—thereby alerting national authorities on vulnerabilities in their financial sectors—and assist them in designing measures to reduce weaknesses. The FSAP also determines the development needs of the financial sector. Sectoral developments, risks, and vulnerabilities are analyzed using a range of financial soundness indicators and macro-financial stress tests.<sup>18</sup> As of March 2008, FSAP reports had been prepared on 110 countries. It should be noted that while the IMF reportedly requested the US to undergo an FSAP evaluation prior to the outbreak of the subprime crisis, the US government rejected the request. It was only at the end of 2007 when the US finally agreed to an FSAP.

### **3.2.2 Establishing the Financial Stability Board**

In the aftermath of the Asian financial crisis, two new international forums were launched in 1999, the G20 process for finance ministers and central governors and the FSF for major economies' financial authorities (finance ministries, central banks, and regulatory authorities). The G20 process was introduced as a forum to promote international financial cooperation to achieve stable, sustainable growth of the world economy.<sup>19</sup> The FSF aimed to facilitate information exchange among major financial centers and strengthen international cooperation on financial market supervision and surveillance.

With the outbreak of the global financial crisis in the fall of 2008, the G20 was upgraded from a finance ministers' process to the leaders' process, with the objective of supporting global economic recovery and putting the economy back on track to sustainable growth. It has become the "premier forum" for international economic and financial cooperation, possibly

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<sup>17</sup> Bilateral surveillance is the process of regular dialogue and policy advice provided to each member country, and covers macroeconomic and financial developments and policies. Multilateral consultations allow the IMF to focus on common economic and financial issues, such as global payments imbalances. Technical assistance includes training and advice on improving monetary and fiscal management, foreign exchange and capital market development, development of the legal framework for banking, and prudential regulations, among other things.

<sup>18</sup> Other areas are also analyzed, including systemic liquidity arrangements, institutional frameworks for crisis management and loan recovery, transparency, accountability and governance.

<sup>19</sup> The members of the G20 are: Argentina, Australia, Brazil, Canada\*, PRC, France\*, Germany\*, India, Indonesia, Italy\*, Japan\*, Korea, Mexico, Russia\*, Saudi Arabia, South Africa, Turkey, the UK\*, the US\*, and the European Union (EU), where countries with \* are among the G8 members.

replacing the narrower G8. Based on the agreements of the G20 Summit meetings, the FSF has been expanded to become the FSB with a sweeping mandate and a larger membership (rising from 12 to 25 members).<sup>20</sup> For the FSB to perform its ambitious mandate, it is essential that the US and the UK—home of the two largest international financial centers—make full commitments to the substantial upgrading of the regulatory and supervisory policies.

While pointing out the importance of ensuring an adequate balance between macroprudential and microprudential regulation, the G20 process is focusing on the following:

- building high quality capital and mitigate procyclicality—the introduction of higher levels and better quality capital requirements, countercyclical capital buffers, higher capital requirements for risky products and off-balance sheet activities, larger liquidity risk requirements, and forward-looking provisions (by the end of 2012);
- reforming compensation practices;
- improving over-the-counter (OTC) derivatives markets—all standardized OTC derivative contracts to be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central clearinghouses (by the end of 2012); OTC derivative contracts to be reported to trade repositories; and non-centrally cleared contracts to be subjected to higher capital requirements; and
- addressing cross-border resolutions and systemically important financial institutions (by the end of 2010)—including plans for systemically important financial firms to craft internationally consistent firm-specific contingency and resolution procedures, and for the authorities to develop resolution tools and frameworks for the effective resolution of financial groups to help mitigate the disruption of failures and reduce moral hazard.

### 3.3 Capital Flow Management and Exchange Rate Regime Choice

#### 3.3.1 Capital account liberalization

Financial crises in emerging market economies have demonstrated that abrupt or improperly sequenced liberalization of the capital account can generate vulnerabilities and possibly provoke a currency crisis. A surge in capital inflows and a sudden stop or reversal of capital flows can occur, often due to contagion or external shocks, not necessarily because of domestic factors.

It is now well-understood that, in countries with relatively closed financial markets, capital account liberalization should be considered as an integral part of a comprehensive reform program as there is a strong linkage among capital account liberalization, domestic financial sector reform, and the design of monetary and exchange rate policy. That is, it should be properly sequenced and paced with the implementation of other reform measures so that countries can progress beyond “institutional thresholds” (Prasad and Rajan 2008).

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<sup>20</sup> The FSB has grown to 25 members by adding all G20 members, Spain and the EU. The original 12 members of the FSF are: Australia; Canada; France; Germany; Hong Kong, China; Italy\*; Japan; Netherlands; Singapore; Switzerland; the UK; and the US.

The FSB mandate is sweeping. It proposes to: assess vulnerabilities affecting the financial system; identify and oversee action needed to address them; promote coordination and information exchange among authorities responsible for financial stability; monitor and advise on market developments and their implications for regulatory policy; advise on and monitor best practices in meeting regulatory standards; undertake joint strategic reviews of the policy development work of the international standards setting bodies; set guidelines for and support the establishment of supervisory colleges; manage contingency planning for cross-border crisis management; and collaborate with the IMF to conduct early warning exercises.

From this perspective, it is useful to draft a credible timetable for capital account liberalization so that a financially closed country could lay out the blueprint for comprehensive reforms including capital account liberalization. Most important is the establishment of core institutional infrastructure—well-defined property and creditor rights; credible accounting standards; benchmark corporate governance; clear minority shareholder rights; stringent prudential and regulatory regimes.

### 3.3.2 Capital Flow Management

Economies with relatively open capital accounts face the challenge of managing potentially volatile and procyclical capital flows. Large and rapid inflows of mobile capital can suddenly stop or even reverse themselves and, thus, threaten domestic macroeconomic and financial-sector stability. The authorities may use a combination of several policy options to contain or mitigate the impact of large, disruptive capital inflows. They may, for example:

- accumulate foreign exchange reserves through sterilized interventions, as a short-term measure to cushion the impact of future reversals of capital flows;
- introduce greater exchange rate flexibility, leading to currency appreciation and stemming speculative inflows;
- encourage capital outflows, to lessen the upward pressure on the currency and the need for costly sterilized interventions;
- adopt prudential controls—such as higher reserve requirements and caps on external borrowing—that limit short-term capital inflows;
- tighten fiscal policy when inflows are associated with an economic boom, which can limit procyclical capital inflows; and
- establish a sound financial system.

There is no silver bullet solution, and policymakers need to find the best combination for their countries given the specific country conditions. The first option listed above is not sustainable and bears increasingly large costs over time. The second option is reasonable as it frees monetary policy for domestic economic management, but may be difficult to adopt as exchange rate appreciation can damage the country's international price competitiveness.<sup>21</sup> The third option is helpful, but can invite more inflows as investors can more easily get out. The fourth option includes the Chilean style capital inflow control—unremunerated reserve requirements on capital inflows—that was used in Chile, Colombia, and Peru and has been accepted as a less distortionary measure by the IMF. The fifth option—promoted by the IMF—can improve the current account position and hence reduce vulnerabilities, but is often difficult to implement quickly. The last option is intended to make the financial system resilient so that the sudden stop or reversal of capital flows has only limited impact on the country's financial system. But this requires structural efforts.

Finally, emerging economy governments are often cautious in internationalizing their currencies as traders can use offshore markets for speculative activities. Policymakers should apply an integrated set of rules and regulations to prevent an overly active offshore market for domestic currencies, with the support of international organizations where appropriate (Emerging Markets Eminent Persons Group 2001).

### 3.3.3 Choice of an Exchange Rate Regime

The “two-corner solutions” argument—that either a credibly fixed peg (e.g., a currency board system or full dollarization) or a pure float is sustainable (Fischer 2001)—has been discredited as a result of the failure of the Argentine currency board system, and is

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<sup>21</sup> This suggests the value of international coordination of exchange rate policies that would allow joint currency appreciation among countries simultaneously experiencing large capital inflows.

inappropriate for many emerging market economies. The reason is that these economies have financial sectors that are not fully developed or sufficiently deep, and are only partially integrated into global capital markets. Their banking and corporate sectors cannot absorb high exchange-rate volatility under a pure float, while a fixed parity would prevent active monetary policymaking, required for non-inflationary growth.

In this sense, many emerging market economies do reveal a preference for an “intermediate” exchange rate regime or a managed float. As these economies tend to be subject to various types of external shocks—commodity prices, global interest rates, and sudden shifts in investor sentiments—the authorities often have to intervene in the foreign exchange market to counter those shocks. This is certainly the case with Asian emerging market economies (Kawai and Takagi 2005).

However, some economies have shown a preference for stable exchange rates anchored against an external currency like the US dollar. Policymakers in these economies must be aware that their regime choice is inevitably constrained by the “impossible trinity.” In addition, fixed exchange rates often provide the false sense of an implicit guarantee and, as a result, generate rapid capital inflows, creating a recipe for disaster, as shown in many emerging market economy crises. This perspective also supports the view that an intermediate exchange rate regime can be more resilient to volatile capital flows.

### **3.4 IMF Surveillance, Liquidity Assistance, and Conditionality**

It has been widely discussed that the operations and functions of the IMF need to be strengthened. The IMF-IEO (Independent Evaluation Office of the IMF [2003]) has argued that the availability of IMF short-term liquidity at the time of crises and contagion needs to be increased, and that policy conditionality attached to IMF liquidity assistance to crisis countries needs to be streamlined, particularly with regard to the nature of macroeconomic policies and the scope of structural policies.

#### **3.4.1 IMF Surveillance**

Responding to a series of emerging market crises in the 1990s and the early 2000s, the IMF began to strengthen its surveillance, aiming to lessen the frequency and severity of disturbances. It now focuses on macroeconomic conditions and financial sector developments, while acknowledging the role of other structural and social issues only to the extent they are macro-critical, that is, having a significant impact on macroeconomic issues, including fiscal expenditures and debt sustainability.

In addition, the IMF introduced multilateral consultations and regional surveillance. The role of multilateral consultations is to put greater focus on issues of systemic importance to the global financial system. The first multilateral consultation dealt with the issue of the global imbalance and involved several systemically important members, namely, the US, PRC, the eurozone, Japan, and Saudi Arabia. The enhancement of regional surveillance—through the publication of a Regional Economic Outlook in each region—to address the main policy issues facing a region and intra-regional linkages, is a welcome advance.

There are a number of regional sources of information that the IMF could draw upon in improving its surveillance. The ASEAN+3 economic surveillance (EPRD), to be described below, is an obvious example. The participation of the IMF in the ASEAN+3 finance and central bank deputies’ process, as a regular policy dialogue partner, is quite useful and important. It would be equally useful if regional groups and entities could play a more direct role in the IMF surveillance process. For example, the IMF may consider having staff from relevant regional organizations and groups join the IMF’s annual Article IV consultation mission to regional member countries. In countries where a regional organization has financial sector operations, it would be mutually beneficial to have the organization’s staff involved in the FSAP.

### 3.4.2 Liquidity Support and Flexible Credit Lines

In order to play its role in safeguarding international financial stability in the wake of the Asian financial crisis, the IMF augmented its lending capacity and facilities. It introduced the Supplemental Reserve Facility (SRF) in December 1997 to provide short-term financing without access limit in the event of exceptional balance of payments difficulties attributable to a sudden and disruptive loss of market confidence.<sup>22</sup> It also introduced a Contingent Credit Line (CCL) in 1999 as a precautionary line of defense to help protect countries pursuing sound policies in the event of a liquidity need arising from the spread of financial crises. Korea was the first crisis country to use the SRF, followed by Brazil, Argentina, and Turkey. However, the CCL never attracted any interest among members and, in November 2003, it was allowed to expire. Besides the General Arrangements to Borrow (GAB), a New Arrangements to Borrow (NAB) came into force in November 1998—doubling the resources of IMF.

With the eruption of the global financial crisis and its severe impact on many emerging market economies, IMF resources have been augmented by US\$500 billion to enhance its capacity to support crisis-affected economies—particularly those on the periphery of Europe. This augmentation of resources took the form of a renewed and expanded NAB. The IMF has also made Special Drawing Rights (SDR) allocations of \$283 billion in total, more than \$100 billion of which will supplement emerging market and developing countries' existing reserve assets.

The IMF reintroduced a type of credit line—a *Short-term Liquidity Facility (SLF)*—in the fall of 2008 to offer quick, large-scale financing without ex-post conditionality. But even the SLF proved ineffective and in March 2009 was superseded by a Flexible Credit Line (FCL) facility, which assured pre-qualified members of large, flexible, upfront access to resources without ex-post conditions. The FCL is similar to, but more flexible than, the earlier CCL in that it offers condition-free loans based on ex-ante qualification criteria and can be drawn for precautionary purposes.<sup>23</sup> Now, Colombia, Mexico, and Poland have signed the FCL.

### 3.4.3 Competing Financing Arrangements

The global financial crisis did not force any Asian country to go to the IMF for financial rescue, nor even raise interest rates to defend the currency value. However, several countries—such as Korea and Indonesia—faced the risk of sudden shortages of US dollar liquidity soon after the Lehman shock in the fall of 2008. Korea saw unusually large downward pressure on its exchange rate and a rapid depletion of foreign exchange reserves and, thus, encountered a mini-currency crisis. But it did not seek IMF liquidity assistance because of the stigma attached to the experience with IMF interventions during the 1997–98 financial crisis. Seeking IMF assistance would have had significant political repercussions within the country.

Instead Korea—together with Brazil, Mexico, and Singapore—established a currency swap arrangement of up to US\$30 billion with the US Federal Reserve in late October. It also entered into currency swap arrangements with the Bank of Japan (BOJ) and the People's Bank of China (PBOC) in December 2008. These currency swaps could be drawn without any policy conditionality and, in this sense, were arrangements that competed against IMF

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<sup>22</sup> SRF resources are made available over a period of one year and carry an interest rate 300bp above the normal IMF charges. They are expected to be repaid between 1 and 1.5 years after withdrawal but the repayment period can be extended for one year. In the latter case the interest spread rises to 500bp.

<sup>23</sup> The FCL allows longer repayment periods (3¼ to 5 years) and imposes no hard cap on access to IMF resources, which will be assessed on a case-by-case basis (while the SLF limited access to 500% of quota), and introduces flexibility to draw at any time on the credit line so that it can be used as a precautionary instrument (which was not allowed under the SLF).

facilities.<sup>24</sup> In fact, news that Korea established a currency swap line with the US Fed immediately stabilized the foreign exchange markets, and the Korean authorities actually drew US dollar liquidity, for currency market support.

#### **3.4.4 IMF Conditionality on Macroeconomic and Structural Policies**

The IMF came in for harsh criticism in 1997–98 for prescribing too contractionary macroeconomic policies and too many structural reforms, and providing mistakes in policy advice (see Ito [2007]). For example, the fiscal policy prescribed in the early phase of the Asian financial crisis—in Thailand and Korea—was contractionary despite the fact that fiscal spending and budget deficits were not causes of the crisis and that the countries were severely affected by the sudden withdrawal of foreign capital and plunged into a major recession. The Indonesian program had over 100 conditions including the reform of the rice distribution system and the dismantling of the clove monopoly (Feldstein 1998), which had nothing to do with the country's capital account crisis.

The IMF appears ready to move away from a “one-size-fits-all” approach to stabilization without always relying on prescribing contractionary macroeconomic policy in the face of crises originating in the capital account. The IMF has also decided to streamline and limit its structural conditionality to a core set of essential features that are macro-relevant and within the IMF's core area of responsibility,<sup>25</sup> with any broader approach requiring justification based upon the specific country situation. Hence, IMF conditionality now covers only macroeconomic policies and macro-critical structural reform policies. This is an improvement given the lessons learnt from the Asian financial crisis, but it remains to be seen how this policy will be implemented. It appears that the IMF programs in Eastern European and Baltic states affected by the current global financial crisis are less harsh than those applied to Asia, but contractionary macroeconomic policies are still imposed on these economies.

### **3.5 International Rules for External Debt Restructuring and Cross-Border Insolvencies**

#### **3.5.1 Private Sector Involvement for External Sovereign Debt Restructuring**

Establishing an international collective framework for an orderly workout of external debt—by involving the private sector and imposing a “standstill”—is needed to achieve a fair sharing of the burden of losses created by a crisis. The reason is that such a framework forces private creditors—who made imprudent lending decisions in a crisis-affected country—to shoulder part of the crisis costs and, thus, mitigates the future moral hazard problem.

By focusing on external sovereign debt, the international community explored two options: a contractual approach and a statutory approach. A contractual approach considers collective action clauses (CACs) in sovereign bond contracts as a device for the orderly resolution of crises; their explicit inclusion in bond documentation would provide a degree of predictability to the restructuring process. A statutory approach, such as the sovereign debt restructuring mechanism (Krueger 2002), attempts to create the legal basis—through universal treaty rather than through a set of national laws in a limited number of jurisdictions—for establishing adequate incentives for debtors and creditors to agree upon a prompt, orderly and predictable restructuring of unsustainable debt.

<sup>24</sup> The PRC has also offered yuan-based currency swap lines with five other central banks, i.e., Hong Kong, China; Indonesia; Malaysia; Argentina; and Belarus. But these swap lines are intended to encourage trade settlement rather than liquidity support for containing currency speculation, given the yuan's lack of capital account convertibility. Hence they are not competing arrangements against IMF facilities.

<sup>25</sup> The IMF's core areas of responsibility include: macroeconomic stabilization; monetary, fiscal and exchange rate policy, including the underlying institutional arrangements and closely related structural measures; and financial sector issues including the functioning of both domestic and international financial markets.

The CACs approach was finally adopted, while a more comprehensive statutory approach was put on hold. Following Mexico's bond issue with CACs in February 2003, several emerging market economies began to include CACs in bond issues under New York law. However, the lack of a sovereign debt restructuring mechanism—a *de facto* international bankruptcy procedure for a country such as Iceland and the Baltic states in the current context—can continue to make crisis resolution difficult.

### 3.5.2 Cross-Border Resolution of Internationally Active Financial Firms

The major impediment to achieving global financial stability is the inadequacy of international rules for dealing with insolvency of internationally active, large, and complex financial firms. There are no international standards for cross-border bank resolution that could potentially overcome the problem of the existing home-country based resolution arrangements. The lack of cross-border resolution rules continues to pose the “too big to fail” or “too interconnected to fail” problem of moral hazard, amplifies uncertainty about not only crisis resolution, but also crisis management and burden sharing across different national jurisdictions. From this perspective, it is encouraging to see that the G20 is trying to address the issue, but it will take a long time before a truly binding international agreement is crafted.<sup>26</sup>

## 3.6 IMF Governance Reforms

IMF governance reforms refer to changes in “chairs and shares” (Truman 2006)—quotas and voting rights, and executive board representation—and the IMF management selection process. The current distribution of quotas and the relative voice of members within the IMF have raised questions about its legitimacy among its shareholders and other stakeholders. IMF governance reforms are deemed to be necessary to restore its legitimacy, so that the IMF could acquire the authority and credibility to carry out its missions.

### 3.6.1 IMF Voice and Vote Reforms

The reform of IMF quotas and voting rights is the most important step to better acknowledge the new reality of the changing world economy and financial order, i.e., the rising weight of large, dynamic emerging market economies, especially those in Asia. Presently, the industrial countries as a group hold about 60% of the votes, the emerging market economies about 20%, and the rest of the world close to 20%. These ratios have not changed significantly. Reforms have begun to take place in several phases. In the first phase, at the 2006 Singapore Annual Meetings of the IMF and the World Bank, a decision was made to make *ad hoc* increases in the quotas of the PRC, Mexico, Korea, and Turkey by small amounts. The second and third phase of the reform exercise is to agree on a new quota formula and to further rebalance quotas (Boorman 2008).

Another aspect of the voice and vote issue is the composition of the IMF executive board. Currently the European countries occupy eight of the 24 chairs at the IMF board. A consensus view is that European countries are over-represented at the board (as well as in terms of voting powers) and that they should agree to reduce their representation. There is an even more compelling reason to argue that, with the establishment of a monetary union, the eurozone should occupy a single chair.

The Pittsburgh G20 Summit agreed to shift at least 5% of votes from over-represented countries, largely in Europe, to under-represented countries, mainly dynamic emerging

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<sup>26</sup> A possible alternative could be to develop an informal agreement similar to the London approach for international insolvencies. Another alternative would be to require each internationally active large bank to craft a “living will” where it elaborates a detailed, pre-packaged resolution procedure that would apply when regulators judge that the bank is insolvent. Such agreements between major banks and their regulators could result in greater predictability about burden sharing across regulatory jurisdictions.

markets and developing countries, using the current quota formula.<sup>27</sup> This would change the distribution of voting powers between the industrial countries and emerging and developing countries from the current 60:40 to 55:45.

### **3.6.2 Credibility and Trust of IMF in Asia**

Mutual trust between the IMF and country authorities is an important element in making IMF operations effective because it provides a healthy environment for frank discussion and exchanges of views. However, the IMF has a credibility problem in Asia. At the time of the Asian financial crisis, the IMF lost its credibility and trust among Asian policymakers and has not regained them yet. The IMF has been viewed as an outside institution that lectures and, at times of crisis, imposes tough “conditionality” on emerging market economies with a “top-down” analysis done in Washington without considering realities on the ground.

One way to rectify this problem is for the IMF to truly support an objective, inclusive process by conducting its operations in an impartial manner. The inclusiveness should extend to the equal treatment of all member countries, large and small. Large, systemically important countries—such as the US, the UK, and the eurozone—must be subject to the same clear, forceful and candid surveillance messages given to other, particularly developing, countries with less economic weight. Given that the burden of adjustment and turbulence from these large economies may likely fall on many other, often emerging and developing, countries, it is imperative for the IMF to focus its macro-financial surveillance on these large economies and to hold them to the same standard as other small countries. This evenhanded treatment is a necessary condition for the IMF to regain credibility and trust among all regions around the world, especially in Asia.

Finally, the tradition that the head of the IMF should be a Western European automatically disqualifies the majority of IMF member countries from leadership of this global financial organization. The choice of the IMF managing director should be based on merit and qualifications and not on nationality. This is an important way to reestablish IMF legitimacy, trust, and ownership on the part of all member countries. To restore the legitimacy of its operations, the IMF needs such significant governance reform.

## **4. EAST ASIA’S EMERGING FINANCIAL ARCHITECTURE**

### **4.1 Financial Cooperation in East Asia**

Following the Asian financial crisis, the East Asian countries began to embark on intergovernmental cooperation to promote regional financial stability. Each country has made efforts to improve its external financial health by reducing short-term borrowing in foreign currency—to avoid the “double mismatches”—and accumulating foreign exchange reserves. Each of them has strengthened its national financial system by restoring a sound banking sector, putting in place a better regulatory and supervisory framework, and developing capital markets. The economies in the region have strived to establish collective mechanisms for regional financial stability to increase resiliency to financial turbulence and shocks.

#### **4.1.1 ASEAN+3 Initiatives**

Leaders of the 10 ASEAN member countries along with the PRC, Japan, and Korea initiated the ASEAN+3 process in 1997, which focused on macroeconomic and financial issues initially and was later expanded to include many other issues—in foreign affairs; economy and trade; environment; energy; health; labor; science and technology; and social welfare,

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<sup>27</sup> The Group of Twenty-four, a group of developing countries forming a coalition to work on international monetary and financial issues, proposes a shift of 7%.



among others. The group's finance ministers have been particularly active on regional financial cooperation, including the launch of the CMI as the region's liquidity support arrangement, the ERPD as the region's economic surveillance mechanism, both in May 2000, and the ABMI as the region's project for local-currency bond market development in August 2003.<sup>28</sup>

The ASEAN+3 leaders in 2004 agreed that the establishment of an "East Asian Community" was their long-term objective and affirmed the role of ASEAN+3 as the "main vehicle" for this eventual establishment. The idea of creating such a community had been proposed by the East Asia Vision Group (2001), whose wide-ranging proposals were considered by the official East Asia Study Group (2002). The ASEAN+3 leaders in 2002 received the Study Group's Final Report, which identified 17 concrete short-term measures and 9 medium- to long-term measures—including regional financial cooperation—to move East Asian cooperation forward. Key medium- and long-term recommendations included, among others, the establishment of a regional financing facility, the pursuit of a more closely coordinated exchange rate mechanism, and establishment of a regional surveillance process. The CMI was considered to be an initial step toward the establishment of a regional self-help financing facility, and the ERPD became the process for regional economic surveillance.

#### **4.1.2 Economic Review and Policy Dialogue**

The ERPD is a regional economic surveillance system—through information exchange, policy discussions, and peer reviews—designed to contribute to the prevention of financial crises through the early detection of irregularities and vulnerabilities and the swift implementation of remedial policy actions. The ERPD was intended to facilitate economic and financial analysis of the global, regional, and individual national economies; monitoring of regional capital flows and financial market developments; assessment and management of vulnerabilities and risks; and joint actions on issues affecting the region. The expectation was that countries would implement better macroeconomic and financial-sector policies and institutional reforms due to peer pressure.

Without a strong supporting infrastructure for such surveillance, however, the ERPD process has not been as effective as initially expected, though gradual improvements have been made over time. One of the problems has been the lack of a secretariat in charge of the process, and another is the absence of central bank governors in the process, although central bank deputies have been participating in ASEAN+3 finance deputies' meetings.<sup>29</sup>

#### **4.1.3 Chiang Mai Initiative**

The CMI is a landmark liquidity support facility in East Asia, which is intended to deter currency speculation and manage currency crises or contagion. It comprises (i) a network of bilateral swap agreements (BSAs) among the PRC, Japan, and Korea, and between one of these Plus-3 countries and the original five ASEAN members and (ii) the ASEAN Swap Arrangement (ASA). The total amount under the bilateral swap agreements reached US\$90 billion—with 16 BSAs—and the total ASA stood at US\$2 billion as of April 2009.

An important feature of the CMI is that a crisis-affected member requesting short-term liquidity support could immediately obtain financial assistance for the first 20% of the BSA amount,<sup>30</sup> and that the remaining 80% would be provided to the requesting member under

<sup>28</sup> See Henning (2002); Bird and Rajan (2002); Kuroda and Kawai (2002); Kawai (2002); Kawai and Rana (2008); and ADB (2008).

<sup>29</sup> Central bank governors in Asia and the Oceania have formed the Executives' Meeting of Asia-Pacific Central Banks (EMEAP) as a completely separate forum from the ASEAN+3 finance ministers' process. Its work focuses on bank supervision, financial markets, payments and settlement systems, and other issues that are of common interest.

<sup>30</sup> Initially the IMF-delink portion was 10% and it was raised to 20% in May 2005.

an IMF program. Linking the CMI to an IMF program and its conditionality was designed to address the concern that the liquidity shortage of a requesting country may be due to fundamental policy problems, rather than a mere panic (i.e., herd behavior) of investors or genuine external shocks, and that the absence of conditionality can create a potential moral hazard problem. The basic idea is that the CMI, as a crisis lending facility, should require conditionality.<sup>31</sup> The potential creditors under the CMI, including Japan and the PRC, seem to believe that the region's inability to formulate and enforce effective adjustment programs in times of crisis should require the CMI to be linked to IMF programs.<sup>32</sup>

#### 4.1.4 Asian Bond Markets Initiative

ASEAN+3 policymakers are promoting local-currency bond markets through the ABMI. Members of the Executives' Meeting of Asia-Pacific Central Banks (EMEAP) are also making efforts through the Asian Bond Funds. These initiatives are expected to help make the Asian financial system more balanced, promote efficient allocation of financial resources and risks, facilitate the recycling of the region's savings for regional investment, and reduce the "double mismatch" problem.

The development and deepening of Asian local-currency bond markets could make the following contributions:

- provide alternative sources of financing for public and private investment (in infrastructure, to small- and medium-sized enterprises, and housing) and alternative modes of wealth holding for Asian institutional investors and households, particularly retirement fund asset management (such as pensions) in a rapidly aging society;
- improve financial resilience by putting in place two balanced wheels of the financial system—sound banking sectors and well-developed capital markets;
- reduce the "double mismatch" problem—currency and maturity mismatches—by mobilizing Asian savings for Asian long-term investment in local currencies and reducing reliance on international capital markets, which have acted both as a reservoir for Asian surplus funds and as a source of finance for Asian investment; and
- help reduce global payments imbalances by creating better and greater domestic investment opportunities.

The ABMI has delivered some tangible results, including the recent decisions to set up a regional credit guarantee and investment mechanism for local-currency bond market development and to further explore the possibility of creating a regional clearance and settlement system.

## 4.2 Progress on CMI Multilateralization

### 4.2.1 CMI Multilateralization

Since May 2005, the ASEAN+3 finance ministers have been working to improve the functioning of ERPD and CMI and to multilateralize the CMI (see Box 1). The ERPD is now considered as an integral part of CMI. A "self-managed reserve pooling" arrangement, governed by a single contractual agreement, has been introduced as a form of CMI

<sup>31</sup> On the other hand, bilateral local-currency swap arrangements between central banks—such as the yen-won swap between the Bank of Japan and the Bank of Korea—which are part of the CMI, are not intended for crisis lending and, hence, not subject to conditionality.

<sup>32</sup> In contrast, members that are potential borrowers, such as Malaysia, seem to believe that the CMI should not be linked to IMF programs.

multilateralization (CMIM).<sup>33</sup> Its total size has been set at US\$120 billion. Member contributions and borrowing limits have been decided; Japan and the PRC (including the mainland and Hong Kong, China) would contribute 32% each, Korea 16% and ASEAN 20%. A decision has been made to establish an independent “surveillance unit” to “monitor and analyze regional economies and support CMIM decision-making” as well as an “advisory panel of experts” to “work closely with the Asian Development Bank (ADB) and the ASEAN Secretariat to enhance the current surveillance mechanism in order to lay the surveillance groundwork for the CMIM” (Joint Media Statement of the 12<sup>th</sup> ASEAN+3 Finance Ministers’ Meeting, May 2009).<sup>34</sup> In a sense, the CMIM is heading toward a more institutionalized structure, operating with the support of a surveillance unit and under the guidance of an advisory panel of experts.

### **Box 1: Progress on ERPD and CMI**

Steady progress has been made to strengthen ERPD and CMI since their launch and more recently to multilateralize the CMI. Some of the major developments over the last few years include:

- integration and enhancement of ERPD into the CMI framework (May 2005);
- raising the ceiling for withdrawal without an IMF program in place from 10% to 20% of the total (May 2005);
- adoption of the collective decision-making procedure for CMI swap activation, as a step toward multilateralizing the CMI (May 2006);
- agreement in principle on a self-managed reserve pooling arrangement governed by a single contractual agreement as an appropriate form of CMIM (May 2007);
- agreement on the total size of the CMIM to be at least US\$80 billion and on the proportion of contribution coming from ASEAN countries and the Plus-3 countries to be 20:80 (May 2008);
- increasing the total size of CMIM from US\$80 billion to US\$120 billion, establishment of an independent surveillance unit, and a possible increase in the IMF de-linked portion above the current limit of 20 percent (February 2009); and
- agreement on all the main components of CMIM—including the individual country contributions, borrowing accessibility, and the surveillance mechanism—and the implementation of the CMIM before the end of 2009, including the establishment of an advisory panel of experts in addition to an independent surveillance unit (May 2009).

Source: ASEAN+3 Finance Ministers Meeting Statements, various years.

The agreement on country contributions, particularly among the Plus-3 countries, was a significant achievement. A few points are noteworthy. First, the CMIM is now designed as a US dollar liquidity support arrangement—thereby excluding the local-currency swaps that are in place in the CMI BSAs—under the same IMF-link arrangement. Second, the CMIM has included all ASEAN+3 members, while Brunei and low-income ASEAN members (Cambodia, Lao People’s Democratic Republic, Myanmar, and Viet Nam) were not included in the CMI BSAs. Hong Kong, China has also joined the CMIM without becoming a formal

<sup>33</sup> Here, CMIM refers to both the wider series of multilateralization and the reserve fund.

<sup>34</sup> The de facto “surveillance unit” function has been fulfilled by the ADB and the ASEAN Secretariat. For example, the ASEAN+3 finance ministers meeting is always convened with the support of the ASEAN Secretary General and the participation of the ADB President in policy dialogue with the ministers. The deputies’ meeting has been attended by the ASEAN Secretariat, ADB, and other expert organizations (including more recently the IMF). The ADB has been providing a confidential report to the deputies.

member of the ASEAN+3 finance ministers' process.<sup>35</sup> In this sense it is now a more inclusive arrangement, and this opens up the possibility of the participation of other countries. Third, Indonesia is now eligible to borrow a smaller amount (US\$11.9 billion) than that provided by CMI BSAs (US\$18 billion). This may require some additional mechanism to cope with possible currency turmoil and crisis in Indonesia.

Partly to respond to the Indonesian dilemma, the Japanese Ministry of Finance (MOF) announced in May 2009 that it would begin to arrange yen-based bilateral currency swap lines with other Asian economies—including Indonesia—up to a total of 6 trillion yen (US\$60 billion equivalent). These arrangements are unusual in the sense that they are subject to the same conditionality as the CMIM and IMF link, and that the Japan MOF will raise the needed funds through the Foreign Exchange Special Account; it will borrow from the market by issuing yen-denominated short-term financing bills. It is reported that the Japan MOF will set up a swap line of ¥1.5 trillion (US\$15 billion equivalent) with Indonesia and is preparing similar arrangements with the Philippines and Thailand.<sup>36</sup>

### 4.3 Lessons from Korea in the Global Financial Crisis for CMIM

The Korean experience soon after the eruption of the global financial crisis provides important lessons for CMIM, as the country did not wish to use the CMI (nor the IMF). When hit hard by currency speculation and capital flow reversals, the country instead went to the US Fed for precautionary liquidity support.

#### 4.3.1 Impacts of the Global Financial Crisis on Korea and Policy Responses

The Korean financial market was hit hard by the external shock following the collapse of Lehman Brothers in September 2008. As the global financial crisis deepened, funds flowed out of the country due to deleveraging by foreign financial firms. Korean financial firms, particularly banks with large wholesale financing requirements, faced a severe liquidity crunch—shrinking foreign currency supply and tight domestic currency liquidity—even though they had not been exposed to large subprime mortgage related instruments.

The real economy slipped into a recession, as Korean exports shrank rapidly, owing to the contraction of import demand in the developed markets of the US and Europe. Korean stock prices had been falling since May 2008 reflecting global weakening in liquidity. Moreover, the Bank of Korea (BOK) had lost large amounts of foreign exchange reserves since March 2008; the reserves declined from US\$264 billion in March to just below US\$200 billion in November. The spread of credit default swap in Korea had started to rise in late 2007, reaching a peak of 700 basis points in late October 2008, just days before a currency swap arrangement with the US Fed was arranged. The won depreciated rapidly, from 907 won per US dollar recorded in October 2007 to 1,483 won per US dollar in November 2008.<sup>37</sup>

The Korean authorities responded swiftly. The BOK eased its monetary policy aggressively, to soothe the financial market unrest and ward off a sharp contraction of the real economy. It expanded won liquidity in those sectors badly affected by the credit crunch through its open market operations and lending facilities, and actively provided foreign-currency liquidity to domestic financial institutions through, for example, the swap market, in order to stabilize the foreign exchange market. The government guaranteed all foreign debts in the banking sector

<sup>35</sup> Hong Kong, China has been a regular participant in ASEAN+3 finance and central bank deputies' meetings and other initiatives such as the ABMI, but always as part of the PRC team.

<sup>36</sup> Indonesia also arranged a "standby loan facility" of up to US\$5.5 billion—or "deferred drawdown options—with Japan (\$1 billion), Australia (\$1 billion), the ADB (\$1.5 billion), and the World Bank (\$2 billion) in 2009. This facility would enable the Indonesian government to secure financial resources for budgetary support to cope with the global financial crisis.

<sup>37</sup> The value of the won recovered afterwards but then reached the weakest level of 1,516 won per dollar in February 2009. Since then the won has strengthened.

until 2011, and announced a fiscal expansion. When the BOK entered into a currency swap arrangement with the US Fed in late October 2008, in an amount of up to US\$30 billion, this had a significant stabilizing impact on the market.

#### **4.3.2 Lessons from Korea**

The most important and effective measure to calm the financial panic was the currency swap arrangement with the US Fed. There were several success factors: First, it was a pre-emptive measure in the sense that the US dollar liquidity support was implemented in the middle of the market turmoil but before it became a currency crisis. Second, the size was large enough to head off currency speculation. Third, it was done as part of the US Fed's arrangements with multiple countries (Korea, Singapore, Brazil, and Mexico), thereby sending the message that Korea was not the only country that needed a commitment of liquidity support.

An important fact is that Korea did not choose to go to its ASEAN+3 peers for liquidity support under the CMI, from which it could have obtained a maximum of US\$23.5 billion. There were three reasons. First, if Korea had done so, it would have had to go to the IMF also because of the CMI requirement of an IMF link, as the amount of borrowing would have exceeded 20% of the CMI BSA. This would have posed a significant political problem for the Korean government, given the stigma associated with the "IMF crisis" in 1997-98. Second, opting for bilateral local-currency swap lines with the BOJ or the PBOC, which had been in place as part of the CMI, would not have been attractive even though the funds could have been drawn for precautionary purposes without the usual conditionality or link to IMF programs. Their size was simply too small (US\$3 billion equivalent with the BOJ and US\$4 billion equivalent with the PBOC) and the yuan was (and still is) non-convertible.

Several policy lessons can be learned from the Korean experience. For countries like Korea to be able to use the CMIM, its IMF link should be dismantled. Under unusually turbulent circumstances as in the case of Korea in the fall of 2008, CMIM support should be made available in a more flexible manner by (i) enabling precautionary lending rather than just crisis lending; (ii) delinking CMIM from IMF without requiring conditionality in a way comparable to the IMF's FCL; and (iii) supplementing CMIM by additional bilateral contributions, involving sufficiently large amounts, from economies inside and outside the region to make ample resources available for potential needs in the region. These considerations would help those countries which would not be able to arrange currency swaps with the US Fed, such as Indonesia, Malaysia, the Philippines, and Thailand.

### **4.4 Policy Challenges**

There are several key policy challenges for strengthening the regional financial architecture in Asia. Given the Asian countries' aversion to requesting IMF financial assistance and their limited access to US dollar swap lines, it is critical that the CMIM would become usable without IMF-links. Essentially, the CMIM process needs to evolve into an Asian Monetary Fund (AMF), an independent regional financing facility.

#### **4.4.1 Transforming the CMIM into an AMF**

The ongoing CMIM process could eventually lead to the creation of an AMF once a strong, independent professional secretariat is set up and the CMIM's IMF link is removed. So the key is to create conditions for IMF-delinking. Formalizing the management of CMIM is necessary for this purpose. A proposed "surveillance unit" that is in charge of regional economic surveillance and CMIM activation could become a permanent secretariat to deal with financial and currency crises as well as normal regional surveillance. A proposed "advisory panel of experts" could function as a *de facto* board of executive directors, making day-to-day decisions, discussing surveillance reports produced by the secretariat, and approving the amount and conditions of crisis lending.

To transform the CMIM into an AMF, the quality of the ERPD needs to improve so that lending conditionality, independent of IMF programs, can be formulated in the event of CMIM activation. The following recommendations should be made for this purpose:

- clarify rules for activating CMIM lending;
- establish a joint forum for finance ministers and central bank governors to intensify policy dialogue among them;
- set up a competent professional secretariat, with the required analytical expertise and policy experience, to enable it to support regional economic surveillance (ERPD), CMIM activation, and independent conditionality formulation; and
- improve the quality of economic surveillance by moving beyond the simple “information sharing” stage to a more rigorous “peer review and peer pressure” stage, and eventually to a “due diligence” stage.<sup>38</sup>

Once these conditions are met, a *de facto* AMF will have emerged, capable of conducting effective surveillance and handling regional financial crises.

A new AMF would also be important from another perspective. It would encourage many Asian economies to embark on the rebalancing of growth toward domestic and regional demand and correcting payments imbalances. After the Asian financial crisis of 1997-1998, many economies in the region saw the high value of building foreign exchange reserves as protection against currency crises, rather than going to the IMF. So these governments had every incentive to accumulate reserves by running large current account surpluses and intervening in the currency markets. The region’s emerging economies would welcome the rebalancing if an AMF could reduce financial turbulence and act as the region’s lender of last resort.

#### 4.4.2 Regulatory Challenge

Due to the financial sector reforms initiated by the crisis-affected countries since the 1997–1998 crisis, Asian financial systems were generally on a sound footing when the global financial crisis struck. Yet, there are more challenges that Asia must face in order to ensure financial development and stability. First, Asian economies must continue the task they started in 1998 to strengthen their financial systems, including raising the value and quality of capital, reducing NPLs, improving the balance sheets and risk management capacity of banks and nonbank financial firms, and subjecting financial firms to frequent stress testing.

Second, whatever the structure of financial sector regulation and supervision a country adopts—that is, whether it is integrated or fragmented—national financial authorities must ensure that they do not allow any firm or instrument to escape the regulatory net and that they have the legal authority and tools to act decisively. In this context, Asian policymakers must emphasize macroprudential supervision to complement their microprudential regulatory and supervisory framework. This means that every Asian government should establish an effective, powerful “systemic stability regulator” to improve financial regulation and supervision from economy-wide perspectives. This regulator should be in charge of prevention, management, and resolution of systemic financial crises.

Third, Asian countries should set up an Asian Financial Stability Board (AFSB)—an Asian version of the FRB—to strengthen cross-border financial supervision and regulation at the regional level and further Asia’s financial stability, by developing effective early warning systems. This forum—to be created among finance ministries, central banks, and financial market regulators and supervisors—could also serve to promote longer-term financial market deepening and integration, establish standards for governance and transparency, and improve investor confidence. A close working relationship should be established between the AFSB and an AMF.

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<sup>38</sup> “Due diligence” involves a rigorous scrutiny of a potential debtor economy and policies from a potential creditor’s perspective (Kawai and Houser 2008).

#### 4.4.3 Exchange Rate Policy Coordination

Currently no consensus exists, even within ASEAN or ASEAN+3, on a regional exchange rate arrangement. But, looking beyond the current global financial crisis and considering the rising degree of economic interdependence within East Asia through trade, investment, and finance, the region's authorities need to embark on exchange rate policy coordination with each other. Once global financial stability begins to be restored and countries in the region register early recoveries and move to monetary policy tightening, one can expect the resumption of large capital inflows into Asia. To manage such capital inflows and maintain macroeconomic and financial sector stability, it will be important for the authorities to allow greater exchange rate flexibility vis-à-vis outside currencies—such as the US dollar and the euro—but this may damage a country's international price competitiveness when its neighbors resist currency appreciation. Hence, the best policy option for the region is to allow collective currency appreciation vis-à-vis the US dollar and the euro, while keeping relative stability of intraregional rates, which would maintain each country's international price competitiveness and spread adjustment costs across countries (Kawai 2008). Such collective exchange rate appreciation of the East Asian currencies would require a significantly coordinated approach to exchange rate regimes.

To prepare for this type of policy coordination, emerging East Asian economies may consider adopting a common exchange rate regime—by managing their respective exchange rates with a common reference, such as a common basket of external and internal currencies (for example, comprising the US dollar, the euro, the pound sterling, and an Asian Currency Unit [ACU])—in order to avoid large misalignments and instabilities of their effective exchange rates and intra-regional exchange rates. An ACU is a basket of ASEAN+3 currencies (and possibly including the Hong Kong dollar) with appropriate weighting.<sup>39</sup> An ACU index could measure the degree of joint movement of East Asian currencies and the divergence of individual component currencies from the regional average, given by the ACU rate. Once the PRC moves to exit from its current US dollar-based regime and adopt a more flexible exchange rate regime, ACU movements and divergence indicators would provide more meaningful information.

These efforts could help further strengthen Asian monetary cooperation. Collective appreciation requires at least informal policy coordination—through more effective policy dialogue and communication among ASEAN+3 authorities—in terms of their choice of exchange rate regimes. Use of an ACU index would be useful in facilitating policy dialogue and currency-market surveillance. This could be followed by more formal coordination of exchange rate policy with clearly defined rules for exchange rate parities, which could be defined in terms of an ACU basket, and exchange market interventions.

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<sup>39</sup> The ADB-led initiative of creating an ACU index in 2006 was suspended due to the Plus-3 country position that currency weights in an ACU index should not be decided by ADB, but at least those among the Plus-3 countries should be decided by the countries concerned. Now that all ASEAN+3 countries and Hong Kong, China decided their contributions to CMIM, the ADB might use these shares as weights for the construction of an ACU index. These weights are not too far from those constructed based on GDP, trade, and capital account transactions. See Kawai (2009) for the concept of ACU, alternative currency weights, and its possible roles. Eichengreen (2006) provides a parallel currency approach to ACU.

Interesting remarks were made by Adams (2006), Under Secretary for International Affairs of the US Treasury at the time. He stated: "With respect to an Asian Currency Unit (ACU), there has been some confusion about the US position on this topic. ... We do not see the ACU as a competitor to the dollar. ... We believe that greater exchange rate flexibility is desirable for the region, but are open-minded as to whether that involves currency cooperation within the region." On broader regional financial cooperation, while he wanted to see more "clarity on the CMI" with regard to the amounts available absent IMF programs and the conditions imposed by CMI creditors, he stated "we ... support regional cooperation that is consistent with multilateral frameworks."

## 5. THE WAY FORWARD

It has taken two crises for the international community to seriously focus on the reform of the international financial architecture for crisis prevention, management, and resolution. Facing the global financial crisis of 2007–2009, the international community has responded in a proactive way, by making the G20 Summit the premier forum for international economic and financial cooperation, creating an inclusive, potentially powerful FSB, and augmenting the financial resources of the IMF.

Although it is too early to fully assess the outcome of the recent efforts, the international financial architecture remains inadequate for the needs of many emerging market economies. The procyclicality of international capital flows has to be mitigated. The effectiveness of IMF surveillance should be improved—particularly that of systemically important economies and markets such as the US, the UK, and the eurozone. International liquidity support should be made available when any country with sound economic and financial management is put into crisis. International agreements should be reached on external (sovereign) debt restructuring for fair burden sharing of losses between creditors and debtors, and on the cross-border resolution of insolvent, internationally active financial firms for fair burden sharing among different countries' authorities.

Given the political stigma associated with the IMF interventions during the Asian financial crisis, many economies in Asia will not go to the IMF for liquidity support at the onset of a crisis. As, unlike Korea and Singapore, most Asian economies—such as Indonesia, Malaysia, the Philippines, and Thailand—are unlikely to be able to obtain currency swap lines from the US Federal Reserve, there is a need to make the CMIM more flexible and functional particularly in unusual turbulence like the one Korea faced in the fall of 2008. Considering that Asian emerging market economies do not issue reserve currencies and have ample incentives to accumulate foreign exchange reserves, a reform of the international monetary system is highly urgent.

In addition to the G20 process, the international community needs effective and inclusive global governance structures to reflect the greater voice of new, rising players from the emerging market world. Efforts should include reforms of global financial organizations, incorporating the changing economic realities into their governance structures. This would help these economies shoulder greater responsibilities in global economic management and also help increase the legitimacy and credibility of the global organizations. Such global governance reforms would require a strong sense of responsibility on the part of major developed countries so that they would share the power to control such organizations more equitably with the rising new players.

A well-functioning regional financial architecture could complement and strengthen the international financial architecture. East Asia—which achieved remarkable economic growth, accumulated large stocks of wealth, became the manufacturing center for the world economy, and is trying to rise to prime consumers of world production—needs to play a bigger role in global economic and financial management. By building on market-driven economic integration through trade, investment, and finance, East Asia can contribute to the healthy growth of the world economy and the stability of global finance.

East Asia should further deepen market integration through a policy-driven creation of a single region-wide free trade agreement—among the countries of ASEAN+3 or ASEAN+6 (which adds India, Australia, and New Zealand). To strengthen regional financial cooperation, the ASEAN+3 authorities should focus on: (i) the establishment of resilient national financial systems, including bond markets; (ii) integration of national financial markets to facilitate the mobilization of regional savings for regional investment in infrastructure and SMEs; and (iii) enhancement of regional liquidity (CMIM) and surveillance (ERPD) arrangements. To better manage forthcoming capital inflows and upward pressure on currency values, the region should intensify regional exchange rate policy coordination in order to achieve sustained



economic growth without creating macroeconomic and financial instability. An integrated Asia would be able to work with the US and the EU more effectively for the stability of global finance and the reduction of global imbalances.

## REFERENCES

- Adams, T. D. 2006. A Miracle in the Making? Remarks at the World Economic Forum—East Asia Panel on Asia's Financial Integration, US Treasury, Washington, DC, June.
- Asian Development Bank. 2008. *Emerging Asian Regionalism: A Partnership for Shared Prosperity*. Manila: ADB.
- Bernanke, B. S. 2005. The Global Saving Glut and the U.S. Current Account Deficit. Speech presented at the Homer Jones Lecture, Federal Reserve Bank of St. Louis, St. Louis, MO, 14 April.
- Bird, G., and R. S. Rajan. 2002. The Evolving Asian Financial Architecture. *Princeton Essays in International Economics (International Economics Section)* 226(February).
- Boorman, J. 2008. An Agenda for Reform of the International Monetary Fund. Occasional Papers No. 38 (January), Dialogue on Globalization. New York and Bonn: Friedrich Ebert Stiftung.
- De Brouwer, G. 2001. *Hedge Funds in Emerging Markets*. Cambridge, UK and New York, NY: Cambridge University Press.
- East Asia Study Group. 2002. *Final Report of the East Asia Study Group*. Phnom Penh, Cambodia: ASEAN+3 Summit.
- East Asia Vision Group. 2001. Toward an East Asian Community: Region of Peace, Prosperity and Progress. East Asia Vision Group Report. <http://www.mofa.go.jp/region/asia-paci/report2001.pdf>.
- Eichengreen, B. 1999. *Toward a New International Financial Architecture: A Practical Post-Asia Agenda*. Washington, DC: Institute for International Economics.
- . 2006. The Parallel-Currency Approach to Asian Monetary Integration. *American Economic Review* 96(2): 432–436.
- . 2009a. Reforming the International Financial Architecture after Ten years: The View from Emerging Markets. *Macro Economy Proceedings, Tokyo Club Foundation for Global Studies* 4(February): 1–18.
- . 2009b. Out of the Box Thoughts about the International Financial Architecture. IMF Working Paper WP/09/116 (May). Washington, DC: IMF.
- Emerging Markets Eminent Persons Group. 2001. *EMEPG Seoul Report: Rebuilding the International Financial Architecture*. Seoul: Institute for Global Economics.
- Feldstein, M. 1998. Refocusing the IMF. *Foreign Affairs* 77(March/April): 20–33.
- Financial Stability Forum. 2008. Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience. Basel and Geneva: Financial Stability Forum.
- Fischer, S. 1999. On the Need for an International Lender of Last Resort. *Journal of Economic Perspectives* 13(Fall): 85–104.
- . 2001. Exchange Rate Regimes: Is the Bipolar View Correct? *Journal of Economic Perspectives* 15(Spring): 3–24.
- Ghosh, A., T. Lane, M. Schulze-Ghattas, A. Bulir, J. Hamann, and A. Mourmouras. 2002. IMF-Supported Programs in Capital Account Crises. Occasional Paper 210. Washington, DC: IMF.
- Goldstein, M. 1998. *The Asian Financial Crisis*. Washington, DC: Institute for International Economics.

- Greenspan, A. 2005. Federal Reserve Board's Semiannual Monetary Policy Report to the Congress. Testimony before the Committee on Banking, Housing, and Urban Affairs, US Senate, Washington, DC, 16 February.
- Griffith-Jones, S., and J. A. Ocampo. 2003. *What Progress on International Financial Reform? Why So Limited?* Stockholm: Almqvist & Wiksell International.
- Henning, R. C. 2002. *East Asian Financial Cooperation*. Washington, DC: Institute for International Economics.
- Hüpkens, E. 2009. Crisis Resolution: Where We Stand and How to Improve It? A paper for the conference "After the Storm: The Future Face of Europe's Financial System," IMF, Brussels, 23 March.
- IMF. 2009. Initial Lessons of the Crisis for the Global Architecture and the IMF, Prepared by the Strategy, Policy, and Review Department. Washington, DC: IMF. <http://www.imf.org/external/np/pp/eng/2009/021809.pdf>.
- IMF-IEO. 2003. *IMF and Recent Capital Account Crises: Indonesia, Korea, Brazil*. Washington, DC: Independent Evaluation Office of the IMF.
- Ito, T. 2007. Asian Currency Crisis and the International Monetary Fund, 10 Years Later: Overview. *Asian Economic Policy Review* 2(1): 16–49.
- Kawai, M. 2002. Global, Regional and National Approaches to the International Financial Architecture: Lessons from the East Asian Crisis. *The International Economy* (Special Issue, Japan Society of International Economics) Screening Series 7(November): 65–108.
- . 2008. Toward a Regional Exchange Rate Regime in East Asia. *Pacific Economic Review* 13(1): 83–103.
- . 2009. An Asian Currency Unit for Regional Exchange-Rate Policy Coordination. In *Fostering Monetary & Financial Cooperation in East Asia*, edited by D.-K. Chung and B. Eichengreen. Singapore: World Scientific.
- Kawai, M., and C. Houser. 2008. Evolving ASEAN+3 ERPD: Towards Peer Reviews or Due Diligence? In *Shaping Policy Reform and Peer Review in Southeast Asia: Integrating Economies and Diversity*, edited by the OECD. Paris: Development Centre, OECD.
- Kawai, M., R. Newfarmer, and S. Schmukler. 2005. Financial Crises: Nine Lessons from East Asia. *Eastern Economic Journal* 31(2): 185–207.
- Kawai, M., and M. Pomerleano. 2009. Containing a Systemic Crisis: Is There a Playbook? Paper presented at the Federal Reserve Bank of Chicago and the World Bank conference "The International Financial Crisis: Have the Rules of Finance Changed?" Chicago, IL, 24–25 September.
- Kawai, M., and P. B. Rana. 2008. The Asian Financial Crisis Revisited: Lessons, Responses and New Challenges. In *Lessons from the Asian Financial Crisis*, edited by R. Carney. Routledge.
- Kawai, M., and S. Takagi. 2005. Strategy for a Regional Exchange Rate Arrangement in East Asia: Analysis, Review and Proposal. *Global Economic Review* 34(1): 21–64.
- Kenen, P. 2001. *The International Financial Architecture: What's New? What's Missing?* Washington, DC: Institute for International Economics.
- Krueger, A. 2002. *A New Approach to Sovereign Debt Restructuring*. Washington, DC: IMF.
- Kuroda, H., and M. Kawai. 2002. Strengthening Regional Financial Cooperation in East Asia. *Pacific Economic Papers* 332(October): 1–35.

- Laeven, L., and F. Valencia. 2008. Systemic Banking Crises: New Database. IMF Working Paper WP/08/224. Washington, DC: IMF.
- Ocampo, J. A., and M. L. Chiappe. 2003. Counter-Cyclical Prudential and Capital Account Regulations in Developing Countries. Stockholm: Almqvist & Wiksell International.
- Prasad, E. S., and R. G. Rajan. 2008. A Pragmatic Approach to Capital Account Liberalization. *Journal of Economic Perspectives* 22(3): 149–172.
- Sachs, J. 2008. Amid the Rubble of Global Finance, A Blueprint for Bretton Woods II. *Guardian* online. [www.guardianonline.co.uk](http://www.guardianonline.co.uk) (accessed 22 October 2009).
- Shin, H. S. 2009. It Is Time for a Reappraisal of the Basic Principles of Financial Regulation. [www.voxeu.com/index.php?q=node/2949](http://www.voxeu.com/index.php?q=node/2949) (accessed 31 January 2009).
- Taylor, J. B. 2009. *Getting off Track: How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis*. Stanford, CA: Hoover Institution Press.
- Truman, E. M., ed. 2006. *Reforming the IMF for the 21<sup>st</sup> Century*. Washington, DC: Institute for International Economics.
- World Bank. 1998. *East Asia: The Road to Recovery*. Washington, DC: World Bank.
- . 2000. *East Asia: Recovery and Beyond*. Washington, DC: World Bank.
- Yoshitomi, M., and S. Shirai. 2000. Policy Recommendations for Preventing Another Capital Account Crisis. Technical Background Paper (7 July). Tokyo: ADBI.