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## ADB Working Paper Series on Regional Economic Integration



### Global Financial Regulatory Reforms: Implications for Developing Asia

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Douglas W. Arner and Cyn-Young Park  
No. 57 | September 2010





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Douglas W. Arner<sup>+</sup> and Cyn-Young Park<sup>\*\*</sup>  
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## **Abstract**

The objective of global regulatory reform is to build a resilient global financial system that can withstand shocks and dampen, rather than amplify, their effects on the real economy. Lessons drawn from the recent crisis have led to specific reform proposals with concrete implementation plans at the international level. Yet, these proposals have raised concerns of relevance to Asia's developing economies and hence require further attention at the regional level. We argue that global financial reform should allow for the enormous development challenges faced by developing countries—while ensuring that domestic financial regulatory systems keep abreast of global standards. This implies global reforms should be complemented and augmented by national and regional reforms, taking into account the very different characteristics of emerging economies' financial systems from advanced economies. Key areas of development focus should be (i) balancing regulation and innovation, (ii) establishing national and cross-border crisis management and resolution mechanisms, (iii) preparing a comprehensive framework and contingency plan for financial institution failure, including consumer protection measures such as deposit insurance, (iv) supporting growth and development with particular attention to the region's financial needs for infrastructure and for SMEs, and (v) reforming the international and regional financial architecture.

*Keywords:* financial regulatory reform, global financial architecture, G-20, Asia, national and regional reform

*JEL Classification :* E61, G1, G2, G28





## 1. Introduction

The global financial and economic crisis that started in 2007 highlighted gaps and weaknesses in the current international financial architecture as well as national regulatory systems. Two major shortcomings in the modern global financial system have shaped an array of possible regulatory, supervisory, and prudential reforms. First, supervisors failed to limit excessive risk-taking and leverage by financial institutions. Market failures, due in part to rapid financial innovation, discredited the regulatory model that relied on transparency, disclosure, and market discipline to curb inordinate risk. Second, the absence of well-established crisis management mechanisms both locally and internationally—revealed in the failure to quickly address impaired financial institutions—sapped confidence in the system.

Against this backdrop, the objective of global regulatory reform is to build a resilient global financial system that can withstand shocks and dampen, rather than amplify, their effects on the real economy. The goal is to ultimately support vibrant economic activity and growth.<sup>1</sup> There is broad agreement on the key principles of reform—bolstering macroprudential supervision to reduce procyclicality and guard against a build up of systemic risk, broadening the regulatory perimeter to include all systemically important financial institutions, improving international financial standards, and strengthening crisis resolution mechanisms.

Lessons drawn from the recent crisis have led to specific reform proposals with concrete implementation plans at the international level. Leaders of the G-20 have committed to building a stronger, more globally consistent, supervisory and regulatory framework for the financial sector—to support sustainable growth and serve the needs of business and citizens. Accordingly, the G-20 has established five main principles to guide the reforms: (i) strengthen transparency and accountability; (ii) enhance sound regulation; (iii) promote integrity in financial markets; (iv) reinforce international cooperation; and (v) reform the financial architecture.<sup>2</sup>

Under the premise of the G-20's guiding principles, the Financial Stability Board (FSB) and its constituents have identified weaknesses and are developing reform proposals appropriate to today's global financial system.<sup>3</sup> In this respect, the G-20 and the FSB have thus far concentrated on a wide range of issues. The six core aspects include (i) building high quality capital and liquidity standards and mitigating procyclicality, (ii) reforming compensation practices to support financial stability, (iii) improving regulation of over-the-counter (OTC) derivatives markets, (iv) addressing systemically important financial institutions and cross-border resolutions, (v) strengthening adherence to

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<sup>1</sup> In addressing the causes and necessary responses to the global financial crisis, the leaders of the Group of Twenty (G-20) have pledged their commitment to (i) restore confidence and growth, (ii) repair the financial system, (iii) strengthen financial regulation, (iv) fund and reform international financial institution, (v) reject protectionism and promote global trade and investment, and (vi) build an inclusive, green, and sustainable recovery (G-20, 2008, 2009a, and 2009b).

<sup>2</sup> See G-20 (2010b).

<sup>3</sup> For a summary, see FSB (2010a, 2010b).

international supervisory and regulatory standards, and (vi) strengthening accounting standards.<sup>4</sup>

In addition to these issues, the G-20 and FSB are also working toward (i) developing macroprudential policy frameworks and tools, (ii) addressing the differentiated nature and scope of regulation, (iii) establishing appropriate hedge fund regulations, (iv) considering regulation of credit rating agencies and how credit ratings are used, (v) supporting development of supervisory colleges for major cross-border financial institutions, and (vi) supporting the revival of securitization.<sup>5</sup>

Despite the critical nature of these reforms for developed G-20 members, concerns are rising among developing economies that these issues tend to focus on developed economies with advanced financial markets. They have little direct relevance to the challenges facing emerging economies and financial systems, especially those with less developed financial systems. As a result, the global financial reform efforts risk ending up being largely seen as irrelevant for developing economies, rather than constructing concrete rules and standards that can be implemented globally.

Moreover, identifying common concerns among Asia's economies is not simple. Asia comprises more than 4 billion people (60% of world population) in over 40 different nation-states. Its vast size, huge range of cultures, political environments, historical ties, government, and economic systems mean that it would be difficult to generalize about Asia. In terms of economic development, Asia has considerable disparities—while the People's Republic of China (PRC) and Japan are the second and third largest economies globally (measured by nominal GDP in mid-2010), Mongolia, Maldives, Bhutan, and Timor-Leste remain among the smallest. At the same time, while Japan is a highly developed economy, PRC, India, and Indonesia all remain emerging economies with wide disparities in income levels domestically. However, across the region there is consensus in two areas: first, there is an overriding interest in economic growth and development; and second, there is the drive to create inclusive growth to support social stability and equity. Therefore, when considering issues related to financial regulation and global economic governance, these twin objectives must be central in constructing regional views and strategies related to domestic, regional, and global financial reform.

For Asia, the key lessons of the crisis are the need to enhance mechanisms to address economic and financial stability, to balance and diversify economies, and to develop more effective domestic, regional, and global financial systems.<sup>6</sup> Such financial systems must support both economic growth through financial development and stability.

Based on the above, this note evaluates current G-20 proposals for financial regulatory and supervisory reforms, focusing on their potential impact on Asia's emerging economies and financial systems. The note also identifies potential areas of adjustment and improvement in the proposed regulatory guidelines from the FSB and its constituent

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<sup>4</sup> See FSB (2010e).

<sup>5</sup> See FSB (2010c).

<sup>6</sup> See Arner & Schou-Zibell (2010).

organizations.<sup>7</sup> In addition, the note seeks to identify a basis for the region’s strategic agenda in the G-20 framework for reform of global economic governance—focusing on international arrangements and institutions, including the International Monetary Fund (IMF) and World Bank, as well as the role of regional arrangements, especially in Asia.

## 2. Key Issues in the Current G-20 Regulatory Reform Agenda

Reforming the regulatory environment for financial systems has been a key priority of the G-20 (See Appendix for the progress of G-20 financial regulatory reform agenda). G-20 Finance Ministers and Central Bank Governors met in Busan, Republic of Korea (Korea) on 5 June 2010 to affirm their commitment to intensify efforts and accelerate financial repair and reform on the following regulatory issues: (i) develop stronger capital and liquidity standards; (ii) address systemically important financial institutions (SIFIs); (iii) ensure proper loss allocation; (iv) improve regulation of hedge funds, credit rating agencies, compensation practices, and OTC derivatives; and (v) strengthen global accounting and financial standards (G-20, 2010a). Other issues discussed include designing macroprudential supervisory frameworks, developing supervisory colleges for cross-border institutions, and resuming securitization. G-20 leaders affirmed on 26–27 June 2010 in Toronto, Canada, their focus on these issues in the context of four “pillars”: (i) a strong regulatory framework and financial market infrastructure; (ii) effective supervision; (iii) resolution and addressing systemic institutions; and (iv) transparent international assessment and peer review (G-20, 2010b). Each of these raise specific issues affecting Asia’s developing economies. There is also concern over relevance—that Asia’s developing economies and regional economic and financial arrangements are somewhat different than those of developed economies and thus their needs differ.

### 2.1 Developing Stronger Capital and Liquidity Standards

Capital, leverage, and liquidity standards have been a central focus of the G-20 regulatory reform throughout the crisis, with the Basel Committee on Banking Supervision (BCBS) tasked to develop detailed proposals. There is broad agreement to strengthen prudential requirements for financial institutions that require more capital, higher liquidity, better risk management, and limited leverage (BCBS, 2009a and 2009b). The emerging focus (Basel III) combines higher and more consistent capital requirements, with renewed risk-weighting and assessment requirements, and liquidity and leverage requirements. However, there are currently disagreements over the context of levels and form of capital, and in relation to the nature of liquidity requirements and the level of leverage limitations.

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<sup>7</sup> The FSB comprises national regulators along with major international and regional financial institutions and regulatory organizations: Bank for International Settlements (BIS); European Central Bank (ECB); European Commission; IMF; Organization for Economic Cooperation and Development (OECD); World Bank; Basel Committee on Banking Supervision (BCBS); Committee on the Global Financial System (CGFS); Committee on Payment and Settlement Systems (CPSS); International Association of Insurance Supervisors (IAIS); International Accounting Standards Board (IASB); and International Organization of Securities Commissions (IOSCO). The following Asia-Pacific jurisdictions are members of the FSB: Australia; PRC; Hong Kong, China; India; Indonesia; Japan; Republic of Korea; and Singapore.

Asian banking systems must work to meet international standards, although their relatively strong capital positions put considerably less pressure compared to their western counterparts.

On capital, global regulators have agreed to raise the quality, consistency and transparency of the Tier 1 capital base. To do this, it would be advisable for the majority of Tier 1 capital to be in common shares and retained earnings, with deductions and accounting treatment (especially for provisioning) being harmonized internationally. In addition, all components of the capital base need to be fully disclosed.

Asia's financial institutions would be relatively less affected than United States (US) and European financial institutions with the new capital, liquidity and leverage requirements. This is due to the relatively mild impact the global financial crisis had on their balance sheets—and partly reflecting the positive effects of post-1997/98 Asian financial crisis reforms (Table 1).<sup>8</sup> Nevertheless, rapidly developing Asian financial systems would soon find the new prudential requirements relevant as financial innovation and globalization will expose them to similar risks underlying the global financial crisis.

Across Asia, developing economies will benefit from simplified capital standards, focusing largely on core equity (Tier 1) and debt (Tier 2). The main challenge facing developing Asia in terms of capital provision, however, is underdeveloped domestic and regional capital markets. As economies across the region grow and banks increase lending, there will be consequent requirements to increase capital. As a result, the availability of well-developed equity and debt capital markets to support bank capital will become an increasingly major concern.

New capital adequacy requirements (CAR) should also include a leverage ratio to dampen excessive leverage. Clearly, excessive leverage was at the heart of the global financial crisis. Several mechanisms are being considered to supplement the minimum CAR, for example, requiring an additional capital charge linked to any mismatch in the asset-liability maturity structure. For developing countries, leverage standards are often easier to implement than the usual capital requirements, as they are both simpler and more transparent. In addition, while risk-weighted capital requirements potentially have the greatest impact in improving financial institutions' risk management practices, leverage combined with clear requirements for higher levels of equity capital will likely contribute to financial stability.

Regulators did not pay sufficient attention to the source and maturity structure funding a bank's asset expansion and growth prior to the crisis. In this regard, it is also important to establish a minimum global standard for funding liquidity. This would include requirements for a stressed liquidity-coverage ratio—given that the riskiness of a bank's asset is intimately linked to the bank's funding sources and term structure.

Excessive reliance on short-term funding during booms—particularly when interest costs and margins are low—appears to have contributed to the fragility of the financial system. Thus, a capital charge on the maturity mismatch from the funding of asset-liability growth

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<sup>8</sup> See Lee and Park (2009).

could help dampen banks' reliance on short-term funds and procyclicality. This means that banks with medium- to long-term assets that have low market liquidity—and those who funded these assets with short-term liabilities—must hold additional capital. The additional capital charge would then force banks to internalize risks from maturity mismatches that give rise to funding liquidity risks. A multiple of CAR set as a function of the months of effective mismatch between asset maturity and funding maturity, for example, could be used for the additional capital charge for maturity mismatches.

For many developing economies in Asia, however, largely underdeveloped local currency bond markets pose a major challenge in requiring stronger capital and liquidity standards (ADB, 2010). New and strong liquidity standards could be problematic for developing economies, especially those with underdeveloped domestic debt markets with limited availability of liquid assets. Continued support for domestic and regional bond market development is key to promoting effective liquidity management. Enhancing regional initiatives, for example the Asian Bond Markets Initiative under ASEAN+3, may be useful in this respect.

Overall, developing Asian economies would benefit from specific guidance from the BCBS in terms of sequencing reforms, especially combined with implementation support through an FSB development committee. Likewise, this is an area for the development of regional arrangements such as the establishment of a high-level Asian Financial Stability Dialogue (AFSD). Regional implementation and monitoring mechanisms, both through independent and peer review processes at the regional level, could add value in the implementation of Basel III capital standards in developing Asia.

## **2.2 Addressing Systemically Important Financial Institutions**

The crisis demonstrated that nonbank financial institutions, either individually or collectively, can pose risks to financial stability or trigger contagion when (i) they are closely connected to regulated entities and/or (ii) have a concentration of assets giving rise to systemic risks. In dealing with SIFIs, international attention has focused, first, on how to define which institutions are systemically important; second, how to close gaps and inconsistencies across regulatory systems and approaches; and third, how to regulate cross-border groups through supervisory colleges (IMF, et al. 2009).

How to define SIFIs? It is not always clear what constitutes a systemically important financial institution that could pose systemic risk because of size or market influence. Therefore, a set of criteria for determining SIFIs would be helpful. Efforts are being made to develop indicators of systemic importance based on size, complexity, and interconnectedness at international as well as national levels, particularly in advanced economies. However, necessary data and methodologies available for thorough assessments remain a challenge to the developing economies in Asia.

Although creating a practical definition of systemic importance may still be manageable for an economy, additional challenges remain for developing economies. Most developing Asian financial systems are bank-centric, and then often concentrated in a small number of financial institutions (Table 2). At the same time, foreign banks may have strong presence in their banking systems. Some institutions, while they do not

necessarily pose global risks, may pose domestic and in some cases regional risks. As such, countries need to carefully analyze the concentration of their respective financial sectors and provide special regulatory attention to domestic SIFIs. A similar approach should be taken regionally with regional SIFIs. Overall, the more systemically significant an institution is—domestically, regionally, and/or internationally—the more regulatory attention it requires, including resolution in case of any failure.

Beyond these issues, recent proposals have covered questions as to whether SIFIs should be broken up and whether banks should be allowed to engage in proprietary trading.<sup>9</sup> Because Asia's developing economies frequently face the different problem of having locally significant but internationally small financial institutions, this first approach of breaking up SIFIs is unlikely to find strong support in the region. Clearly, this means that there is a much greater need for regulatory attention to SIFIs together with the development of relevant, appropriate regulatory standards—and this is where technical assistance from international and regional multilateral development banks could be helpful.

Similarly, in terms of limiting banks' proprietary trading, most authorities in emerging Asian economies will not view this as a priority problem—as their banking systems remain relatively conservative and their activities remain centered on more traditional banking businesses. However, risks from these activities could soon become relevant given the region's rapidly developing banking systems and their demand for greater profitability, growing sophistication, and increasing interaction with global markets (Liu, et al. Forthcoming). As a result, the region's developing economies would need a set of guidelines for dealing with banks' proprietary trading, carefully calibrated to financial and regulatory development across different economies.

The growing cross-border nature of banking and financial services underscores the need for a coordinated oversight of international banking entities. Financial activity is becoming increasingly global, but regulation remains utterly national. While the institution of a global regulator is realistically difficult, it is important to establish a global framework that will mandate minimum consistency across jurisdictions in regulatory principles that would apply to similar markets, institutions, services, and products.

Even before the crisis, there were discussions on establishing supervisory colleges for major cross-border financial institutions. Such colleges have now been established and are in operation for the largest cross-border financial institutions. They are currently addressing issues related to regulatory cooperation and information sharing (through memoranda of understanding), living wills, and contingency planning. Thus far, the focus appropriately has been on major cross-border SIFIs and has not extended to regional SIFIs (except in the context of the European Union [EU]). However, as regional banking systems grow in size, regional supervisory colleges for regional SIFIs should be established through the AFSD (and eventually perhaps an Asian Monetary Fund).

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<sup>9</sup> See Group of Thirty (2009).

### 2.3 Ensuring Proper Loss Allocation

There is growing agreement that the financial sector should assume a fair and substantial share of costs associated with the financial crisis and subsequent government measures to repair banking systems or bail them out. A range of policy options have been discussed, while the G-20 is crafting guiding principles to minimize the use of public funds and reduce risks from financial system procyclicality.<sup>10</sup>

For developing economies, it recommended that adjusted charges relating to deposit insurance and customer protection arrangements may be more appropriate, combined with appropriate resolution arrangements including mechanisms to claw back to the extent possible the costs of any government assistance.

A capital surcharge on SIFIs based on size, complexity, and/or interconnectedness has also been proposed with the aim of mitigating systemic risk. A levy on financial institutions is one option. A levy on the size of bank balance sheets could discourage a financial institution from expanding assets beyond a certain level. A levy can be imposed specifically on non-core bank operations, limiting expansion of banking business into non-core and speculative financial activities. Other alternatives include a range of transaction taxes or Tobin taxes. These may achieve similar purposes by reducing the profitability of speculative financial activities. Transaction taxes can be also applied to cross-border transactions associated with financial speculation. The tax revenue from such levies and taxes can be then used for funding possible resolution in times of crisis.<sup>11</sup>

### 2.4 Improving Regulation of Hedge Funds, Credit Rating Agencies, Compensation Practices, and OTC Derivatives

Broadening regulatory scope and increasing regulatory consistency is important at global, regional, and national levels (BCSB, 2010). The global financial crisis showed that the overall design and coverage of a regulatory system is vital to its effectiveness. Domestic regulatory reviews are essential, with reform to eliminate gaps and overlaps, avoid regulatory arbitrage, increase transparency, and improve coordination among relevant authorities. The crisis also highlighted the need to extend supervision over a wider set of market segments and institutions—especially those deemed systemically important. Many nonbank financial institutions—non-life insurance, hedge funds, monolines, private equity funds, and special investment vehicles (SIVs)—were either lightly regulated or unregulated.

Given the central role regulatory gaps and regulatory arbitrage played in the global financial crisis, these issues are likely to be central to future IMF and FSB regulatory reviews and thus a key focus for Asian jurisdictions, especially for G-20 and FSB members. In Asia, particular concerns arise in the context of complex financial groups,

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<sup>10</sup> Upon the request of the G-20, the IMF analyzed questions relating to financial institution taxes and charges and recommended charges based on size as well as consideration of possible profits taxes. The report was submitted to the G-20 prior to the Toronto Summit.

<sup>11</sup> See United Nations (2009).



especially those of systemic significance. Lessons from the recent crisis show that regulatory gaps and balkanization can create issues of financial stability. An important aspect of constructing new regulatory regimes is to consider a system in a broad and integrated way. Against this backdrop, all Asian jurisdictions should undertake an in-depth analysis of the structure and coverage of their respective regulatory systems. Beyond domestic reviews, regional and international reviews would also benefit, at the international level through the Financial Stability Assessment Program (FSAP) or the FSB, and perhaps regionally through an AFSD.

#### **2.4.1 Hedge Funds and Sovereign Wealth Funds**

Reflecting the infant development stage of the hedge fund industry in Asia, the region's policymakers need to ensure that application of new international regulatory standards and guidelines have proper allowance to support the market development. The hedge fund industry remains limited in many developing Asian economies. However, the region is certainly not insulated from the changing global financial landscape, especially the growing hedge fund industry. In particular, many of the region's economies have consciously promoted regional financial centers, where strict adherence to international norms would be prerequisite to maintain competitiveness. While hedge funds are often causes of concern in terms of potential speculation and instability, they are also an important element for financial market development. They provide diversity and liquidity to markets. In this regard, international regulatory standards and guidelines should be carefully crafted to support appropriate market development.

Given the increasing significance of sovereign wealth funds in the region (Table 3), development of international and regional regulatory guidelines could potentially be very valuable. Such funds also have the potential to both significantly benefit economic development in the region and provide a mechanism for achieving some rebalancing of regional financial flows by potentially better channeling regional savings into regional investments. While the focus to date has largely been at the international level (IWG, 2008), there is a merit in clarifying the role of these funds as well as investment rules and expectations at the regional level in this regard.

#### **2.4.2 Credit Ratings and Credit Rating Agencies**

Misaligned incentives in credit ratings and CRAs drew major criticism during the global financial crisis. While there had been ongoing global efforts to review and reform the role and uses of credit ratings, it was the global financial crisis that prompted the International Organization of Securities Commissions (IOSCO) to revise of the Code of Conduct—adding several tighter provisions against structured finance in May 2008. The FSB and global standard setters have repeatedly affirmed since then their commitment to the review and reform CRA regulations, with the aim of establishing a globally consistent standard.

Asia has been working to develop domestic and regional institutions for credit rating systems. While the momentum slowed due to the global financial crisis, these efforts should continue. The crisis exposed inherent dangers in relying on credit rating agencies to the detriment of investor and regulatory due diligence. However, the recent financial

instability in several EU members brought real questions about the role of international credit ratings and credit rating agencies—in many ways similar to the Asian financial crisis.

There is also need for serious discussion of the merits of basing regulation solely on private sector credit ratings—for example, capital and institutional investor investment requirements. A major opportunity exists to strengthen domestic and regional credit rating agencies while removing excessive reliance on international credit rating agencies for regulatory purposes. At the same time, there will be a need to find adequate replacements—a role which regional credit derivatives markets could take up, if the trading becomes exchange based, centrally cleared, and transparent.

### **2.4.3 Compensation and Financial Institution Corporate Governance**

Compensation practices have been a central G-20 focus, with the release of principles, implementation guidance, and FSB monitoring of compliance (FSB, 2010b). In Asia, where compensation is generally much lower than in advanced economies, this is unlikely to be seen as a major concern. While Asian G-20 members have all taken steps to implement new standards, it could be a potentially difficult issue for some Asian financial centers, as they have been relatively less affected by the crisis and stand to gain competitive benefits.

However, compensation is only one aspect of the concern over wider corporate governance, particularly in the financial sector. G-20 attention to financial sector corporate governance more generally has greater direct relevance across emerging Asia. In the crisis aftermath, there has been growing support for shifting the focus of governance of financial institutions from sales to risks. Financial firms have begun strengthening internal risk management by increasing Board oversight of risk, changing policies and procedures to evaluate credit and trading decisions, and reforming compensation policies to align employee incentives to more risk-focused culture. These changes will likely influence the region's corporate governance practices going forward.

### **2.4.4 OTC Derivatives Markets**

While derivatives have important benefits in risk management and financial asset pricing, the crisis made it clear that they should not be left entirely unregulated. OTC derivatives markets are generally underdeveloped in the region. Most activity takes place in Japan; Singapore; and Hong Kong, China. In many other jurisdictions, OTC markets are embryonic. At this stage, there are real questions as to how much economies in the region should embrace OTC derivatives market development. Reflecting this, the region's developing economies have been rather quiet while the US and Europe have taken the lead role in regulating OTC derivatives markets, covering regulation, clearing, and settlement.

However, this is an area where Asia needs to take further steps, both domestically and regionally. In Asia, there are important opportunities to steer the development of the OTC derivatives markets on a more stable and transparent path—for example, building central clearing and exchange trading arrangements, and developing both regional

infrastructure and regional standards. Clear international consensus on regulation would be highly beneficial in supporting the stable future development of these markets in the region.

As markets develop, concerns in the region will likely focus on the potential for speculation and thus potentially destabilizing effects on financial and economic conditions—concerns brought into focus by the recent instability in Europe and the region’s collective memory of the 1997/98 Asian financial crisis. The region’s both developed and developing economies are likely to support mechanisms to reduce volatility arising from these new markets. For example, although credit default swaps should not be banned altogether, they should be subject to appropriate regulation. Measures could include trading them on the exchange where possible, in addition to central clearing, settlement, and disclosure.

## **2.5 Strengthening Global Accounting and Financial Standards**

### **2.5.1 Accounting Standards**

The G-20 has repeatedly affirmed commitment to developing a single set of international accounting standards. Currently, the focus of discussion is on the scope of fair value—mark-to-market versus a wider fair value based on longer-term historical value. A broad range of issues also exist as to how to harmonize different accounting and regulatory treatments in relation to capital, off-balance sheet assets, and provisioning.

At the same time, most economies in Asia have or are in the process of bringing their domestic accounting systems into line with International Financial Reporting Standards (IFRS) (Table 4). However, gaps remain significant (Table 5) and there is continuing need to build accounting infrastructure across the region in line with international standards. Developing countries in particular can benefit from implementing international accounting standards, with regional support for implementation and related human capital development essential for effectiveness.

### **2.5.2 Adherence to International Supervisory and Regulatory Standards**

Following the Asian financial crisis, the Financial Stability Forum (FSF) was established along with the FSAP to coordinate standard development and implementation. In the wake of the global financial crisis, the FSF was transformed into the FSB and supported by a new G-20/FSB review process—in addition to strengthening the FSAP system.<sup>12</sup> The region actively adopted international standards and financial regulatory reform following the Asian financial crisis. Compliance with core principles for effective banking supervision is in progress, enacted, and intended in many economies in Asia and the Pacific (Table 6).

Looking forward, the FSB process should be strengthened by expanding into a proper international self-regulatory organization. In addition, the IMF should be given a specific mandate under its Articles of Agreement to address financial stability, which would

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<sup>12</sup> See FSB (2010a).

enhance the effectiveness of the FSAP process. At the domestic level, authorities across the region will require technical assistance to implement standards. International standards should be developed further at the regional level, with regional support for implementation and regional monitoring, potentially through an Asian Monetary Fund incorporating the AFSD, Chiang Mai Initiative Multilateralization (CMIM) and its associated ASEAN+3 Macroeconomic Surveillance Office (AMRO).

## **2.6 Other Issues**

### **2.6.1 Macroprudential Supervision**

The major objective of macroprudential supervision is to maintain financial stability. This requires a reshaping of regulatory systems so that authorities are able to identify and take account of systemic risks. The scope of regulation and oversight should extend to SIFIs, instruments, and markets. They should include nonbank financial institutions, and credit rating agencies to ensure they meet international codes of good practice, particularly to prevent unacceptable conflicts of interest. In addition, prudential standards must be designed to address both cross-sectional dimensions (how risk is distributed across a financial system) and time dimensions (how aggregate risk evolves over time) to build buffers for use in bad times.

The macroprudential approach to supervision and regulation should also be complemented and reinforced by effective monetary policy. Financial excess is essentially a macroeconomic problem. Maintaining medium- to long-term price stability is usually considered to be the overarching objective of monetary policy. Price stability in general promotes financial stability, and a sound financial system would contribute to price stability and macroeconomic stability. In the aftermath of the global economic crisis, however, many policymakers and commentators have suggested that central banks should pay greater attention to the financial sector and financial excess, and take financial stability as a statutory objective. For example, monetary policy could put more emphasis on macrofinancial risks. This implies a “preemptive tightening” to try to reduce procyclicality and to prevent dangerous excesses from building in asset and credit markets, even if inflation appears to be largely under control. This includes an attempt to “lean against” an upturn of the credit cycle rather than relying on cleaning up after a bubble bursts.

There is urgent need to design and implement an effective macroprudential supervisory framework. As the global financial crisis demonstrated, there is a complex interplay between monetary policy, fiscal policy, and supervision and regulation, domestically, regionally, and globally. Monetary policy and macroprudential supervision should play complementary roles, with fiscal and structural policies play their part in mitigating systemic risks. This requires a proper mechanism allowing domestic regulators, central bankers, and policymakers to share information, cooperate and, if necessary, coordinate policies. They also need to effectively communicate with the public in one voice. But finding an appropriate mechanism for a particular economy is not an always easy task.

A key challenge is instituting a macroprudential supervisory framework and developing appropriate tools for supervisors in developing economies. Strengthening international or

regional surveillance mechanisms can help by complementing and augmenting relatively weak national monitoring systems in many developing economies across the region.

### **2.6.2 Supervisory Colleges for Major Cross-Border Financial Institutions**

As noted above, while supervisory colleges have now been implemented for major international cross-border financial institutions, there is a need to address major regional financial institutions through similar arrangements, as is now being done in the EU. In Asia, as financial institutions become increasingly active regionally, supervisory arrangements will need to be developed in a parallel fashion, with the AFSD potentially playing the coordinating role.

### **2.6.3 Securitization and Bond Market Development**

Securitization remains largely underdeveloped in emerging Asia, lagging far behind the US or Europe (Figure 1).<sup>13</sup> While debt market development remains an important objective regionally and domestically, the use of securitization has been generally limited for various reasons, including inadequate legal and regulatory support, along with poor market infrastructure.

Vibrant local currency bond markets are essential for efficient allocation of the region's vast resources. The development of local currency bond markets also has the potential to mitigate the global shortage of sound and liquid financial assets; lessen the probability that a currency depreciation will morph into a full blown financial crisis; and reduce massive inflows into, for example, US debt securities and hence help unwind global imbalances. In addition, developed local currency bond markets can reduce the reliance on foreign currency debt—and its concomitant currency mismatches, thus reducing the burden of having to hold large foreign exchange reserves in many developing economies in the region.

Looking forward, regional and national progress toward more transparency and disclosure, centralized trading, and investor due diligence can support market development, financial stability, and economic growth. Here, regional initiatives have proved most helpful as seen in the marked progress in the development of local currency bond markets reflecting the efforts under the ASEAN+3 Asian Bond Markets Initiative (Figure 2). Despite the progress, however, corporate bond issuance is still lagging, hence requiring further policy attention. Another area with strong potential, especially in the context of the region's bank centric financial systems, is covered bonds.

## **3. Balancing Regulation and Innovation**

The key challenge for regulators in emerging Asia is how to encourage and manage financial market development without stifling innovation. Ideal regulation leaves space for innovation, although unfettered innovation can generate risks of its own. The

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<sup>13</sup> See Lee and Park (2008).

experience of past crises suggests caution. But translating caution into regulatory strait-jackets stifles innovation. And this has its own costs. Striking the right balance is the challenge, and it is not an easy one.

Crises highlight the importance of adequate monitoring of financial innovation. Regulators should be wary of complex innovations that make the underlying risks of products or services more difficult to assess or trace—whether by bank management, regulators, or investors. Innovative products also lack the historic data needed to apply appropriate stress testing. Regulators need to assess the impact of innovative products on the safety and soundness of financial institutions, risk management, investor protection, and financial stability in general.

An important distinction should be made between the basic elements of financial market development and risky financial innovation. Many economies in the region continue to face the challenge of developing financial markets to efficiently channel domestic savings into productive investment. Moreover, much of the region still lacks essential financial services—authorities need to encourage greater public access to banking; provide credit to promote entrepreneurship; diversify savings instruments; and develop appropriate products to manage risk.

For emerging Asia, where banks remain the main channel for financial intermediation, building strong banking systems remains paramount. However, authorities must also foster a broader range of markets—including corporate bond markets, securitization, covered bonds, and derivatives—to enhance financial system resilience. Many economies also need to establish, upgrade, or reform basic market infrastructure for trading and settlement, all of which will help promote more efficient financial transactions.

#### **4. Establishing National and Cross-border Crisis Management and Resolution Mechanisms**

Globally, the financial crisis highlighted that, in addition to effective monetary policy, economies need effective arrangements to ensure financial stability—not only for crisis prevention, but for crisis resolution. Clearly, Asian economies must review existing liquidity provision arrangements to address coverage, scope (especially relating to collateral availability), and moral hazard. Asian governments had to intervene to a lesser extent than those in the US and Europe. But based on the responses to the 1997/98 Asian financial crisis and the recent global crisis, advance planning, especially for resolving major financial institutional failure—whether domestic or foreign—is prudent and necessary.

A comprehensive framework and contingency plan for financial institution failure is needed, including consumer protection measures such as deposit insurance. Clear consensus on building appropriate institutional arrangements and systems would be valuable. Simulations that identify possible consequences of both local and international

financial institution failures, as well as market volatility, would help in establishing advance contingency plans.

In reforming crisis management frameworks, remedial or corrective actions need to be harmonized, particularly for large and systemic cross-border financial institutions. In the early stages of the recent crisis, there were issues with cross-border movements of funds and assets to support liquidity or capital requirements of either the parent entity or the subsidiary/branch. To fix this, regulators need to take a broader view of liquidity requirements for cross-border banks and apply a more consistent set of liquidity parameters for them. Disruptive regulatory actions—such as the ring-fencing of liquid assets in the recent crisis—should be used only as a last resort. This requires better knowledge of how cross-border banks conduct business. Complex, large cross-border banks internally manage liquidity in very diverse ways. Host and home supervisory and regulatory authorities need to ensure that these banks hold sufficiently high-quality liquid assets.

The crisis showed that insolvency regimes need to be aligned across economies affected by cross-border bank failures. Delays and uncertainties during the height of the crisis increased uncertainty and exacerbated contagion. For example, measures and processes for managing insolvent banks requiring close out netting, managing creditor claims on collateral assets, or unwinding financial transactions are often designed for domestic operations. A strengthened resolution framework would also help forestall unilateral actions tantamount to financial protectionism. There is a clear need for better information sharing and cross-border burden sharing on costs—for example in the case of work out operations, mergers, or liquidation of cross-border banking businesses.

The resolution of cross-border institutions and questions of burden-sharing have different context for emerging economies. In particular, foreign banks make up an important portion of the domestic financial system in many developing economies. Any failure of these thus raises real financial stability questions for the host financial system, even when the institution is not necessarily systemically significant internationally or even in its home jurisdiction. In this context, there would be great benefit in building international or at least regional approaches to address issues arising from foreign financial institution participation in developing financial systems. We recognize the need to establish regulations including capital requirements for domestic subsidiaries and branches of foreign banks. However, they should be formulated in a way that they do not give undue advantage or disadvantage to foreign banks over domestic banks.

## **5. Supporting Growth and Development**

An appropriately designed institutional framework for finance is needed to achieve the twin objectives of supporting economic growth and financial stability. First, a reliable institutional framework defines the rules of the game for financial transactions and supports financial sector development. Without an appropriate legal and institutional framework, effective finance cannot develop. Second, weak financial sectors have been a significant cause of many financial crises, including the Asian financial crisis and the

recent global financial crisis. Well-established legal and regulatory framework can strengthen financial intermediaries and help prevent crises. Third, it is necessary to develop an effective framework to help resolve financial distress or crisis. Without a solid structure, crisis resolution is more difficult, time-consuming, and expensive. This again is the primary focus of the G-20.

Emerging Asia's underdeveloped financial systems remain an important hurdle to funding necessary development and ensuring sustained high growth. Financial systems need to be strengthened for more efficient resource allocation. The region's financial needs for infrastructure and for SMEs are particularly significant.

An important issue in bank financing of infrastructure is asset-liability mismatches. While infrastructure typically involves long-term finance, banks rely heavily on deposits as their main source of funds. With banks continuing as the major funding source for the region, this asset-liability mismatch problem becomes especially acute. The relatively limited presence of insurance companies, pension, and provident funds also constrain sources of long-term finance in the region.

Financing SMEs is another critical development issue. For many emerging Asian economies, SMEs are the main pillars of production and job creation. Many SMEs in the region need more effective financial assistance for hedging against foreign exchange volatility and trade finance. At this stage, it is important to encourage simple innovations to provide a better menu of financial services and products catering to the needs of small entrepreneurs and investors.

While more structural reforms are underway to broaden and deepen the region's financial systems, their effect will be gradual given the long-term nature of reform. In addition, policy reforms are needed to improve investment climates across emerging Asia. Policies that promote SMEs and services also help. Governments should lower entry barriers facing new firms; ensure level-playing fields for domestically-oriented firms versus export industries; and promote competition including the liberalization of key sectors.

Across emerging Asia, financial sector development will support growth in the context of financial stability. Efforts should initially focus on developing clear international guidelines for developing effective and efficient finance. These include building the foundations for finance and financial infrastructure, especially effective payment systems, clear and transparent property rights, information infrastructure such as credit information system and corporate governance, including insolvency arrangements, and dispute resolution.

The BCBS, IOSCO, and IAIS are now all revising their respective core principles with a greater focus on "preconditions" that take into account differing regulatory systems and stages of development. Across much of emerging Asia, these preconditions (foundations and infrastructure) remain a central development focus. The region's banking systems need to extend their reach to a broader portion of the population, especially to SMEs and through continued development of microfinance. For securities markets, infrastructure, transparency, and corporate governance are central for both development and financial



stability, and in both equity and debt markets. In insurance, major opportunities exist for developing pension and contractual savings arrangements to better employ financial savings and build the social safety nets needed to support growth, development, and stability across the region.

## **6. Reforming the International and Regional Financial Architecture**

Currently, there is a need to improve and streamline the region's regulatory and supervisory regimes, reinforcing global efforts at revamping the financial architecture to avoid a repeat of the crisis. Asia's banks held up well compared with banks in many advanced economies because of their relatively low exposure to subprime mortgages. Nevertheless, enhancing the strength of the system remains paramount. Capital adequacy requirements must be increased. Regulators need to fully assess the impact of innovative products on both the micro- and macro-prudential soundness of financial institutions, risk management, investor protection, and systemic financial stability.

### **6.1 Reform of International Financial Institutions**

Given previous crisis experience, emerging Asia has a keen interest in reforming international financial institutions—especially the IMF—and the international financial architecture in general. Developing countries face direct financial and economic impact from international economic and financial volatility and are vulnerable to any loss of confidence globally or regionally. The IMF reform to keep up with the real challenges of financial globalization is central. Likewise, international support for regional arrangements is extremely valuable, particularly in light of recent crises in European and the implications for new Asian arrangements such as the CMIM.

### **6.2 Addressing Capital Flows**

The potential of speculative capital flows pose policy challenges to many developing Asian economies. The links between capital flows, credit expansion—lending booms with capital account liberalization—and adverse macroeconomic consequences are not new to the region's emerging economies. A surge in capital inflows could complicate macroeconomic management, especially as many economies are beginning to normalize policies related to crisis response.

Managing capital flows must be done judiciously to ensure that external volatility does not disrupt domestic financial markets. An appropriate policy package includes currency flexibility, a clear and stable monetary and fiscal policy, and enhanced regulatory and supervisory efforts to prevent asset bubbles. Authorities should also communicate clearly and effectively with market participants, which could affect policy outcomes. Regional cooperation and coordination can also be crucial to managing capital flows. The establishment of regional financial stability dialogue, i.e. AFSD can help the authorities to address the region's common interests and concerns.

International support and guidance in monitoring and managing capital flows would be helpful for the region's developing economies. And this is an area where the IMF and/or other global and regional multilateral developing banks can provide important advice and technical support.

### **6.3 Effective Regional Financial Architecture**

Asia needs to take its rightful place in the new global financial architecture by actively participating and taking on greater responsibility in developing appropriate supervisory and regulatory structures for the region and the world. As such, Asia needs to make its voice heard in international forums for debating the future of the global economy and reforming the global financial architecture.

Emerging Asia must play its part in ensuring the new financial architecture meets both the challenges of globalized finance and the region's financial development agenda. There are three important areas for regional cooperation: (i) liquidity provision—CMIM; (ii) macroeconomic and financial surveillance—AMRO; (iii) regional bond market development—Asian Bond Markets Initiative; and (4) regional financial stability dialogue—AFSD.

## **7. Conclusion**

The early crisis response was necessarily reactive, rather than focusing comprehensively on the financial sector role in financial stability, sustainable growth, and economic development. Now it is time to forge a clear agenda to guide longer-term reform domestically, regionally, and globally.

First, the G-20 has thus far focused on a range of specific regulatory issues arising directly from weaknesses identified as a result of the global financial crisis. In terms of supporting financial stability, however, there is merit in taking a more comprehensive approach rather than addressing selected issues on a piecemeal basis.

Second, the crisis presents a real opportunity to redesign the international financial architecture to better address the realities of a global financial system, including the needs of developing Asia. It is essential to reform the mandate of the IMF and to design arrangements to support not only financial stability but also financial development at the international level.

Financial systems appear to be inherently subject to periodic financial crises.<sup>14</sup> The international financial architecture (as well as regional financial architectures) should be designed to address the nature of global finance and the characteristics of periodic crises. Likewise, in a world with an increasing range of regional economic and financial arrangements (including in Asia), the international architecture should be designed to support both individual domestic economies and financial systems and regional arrangements.

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<sup>14</sup> See Reinhart & Rogoff (2009).

Third, looking forward, developing Asia would benefit from the establishment of wider regional and sub-regional mechanisms to support regional economic and financial cooperation, coordination, assistance, and monitoring. In particular, these mechanisms could serve a central role in advocating regional interests in the context of global organizations such as the G-20, FSB, and IMF. The CMIM and associated AMRO provides a mechanism for regional economic monitoring, with the ASEAN+3 dialogue process an example of a possible forum for reaching regional consensus on issues being addressed in global forums.

Finally, continuing work to establish an AFSD to develop a consensus on regulatory concerns has real potential value. Support of relevant international institutions such as the IMF, BIS, and OECD could play a pivotal role in the establishment of AFSD, with the regional institutions providing technical assistance and other support in furthering these regional initiatives.

**Table 1: Banking Soundness Indicators (%)**

	Nonperforming Loans to Total Loans <sup>1</sup>		Bank Regulatory to Capital Risk Weighted Assets <sup>2</sup>		Bank Provisions to Nonperforming Loans <sup>3</sup>		Private Sector Loans to Deposit Ratio <sup>4</sup>	
	2000	2009	2000	2009	2000	2009	2000	2009
China, People's Rep. of	22.4	1.6	13.5	10.0	4.7	115.0	95.2	72.6
Hong Kong, China	7.3	1.3	17.9	16.8	—	—	66.7	49.1
India	12.8	2.4	11.1	13.2	—	52.6	63.0	71.4
Indonesia	20.1	3.3	21.6	17.4	36.1	127.4	40.6	75.1
Korea, Rep. of	6.6	0.8	6.7	11.4	81.8	125.2	111.5	126.3
Malaysia	8.3	1.8	11.3	13.5	57.2	95.6	109.4	91.6
Philippines	15.1	3.0	16.2	16.0	43.6	112.3	82.0	58.6
Singapore	3.4	2.5	16.4	13.5	87.2	91.0	99.7	77.9
Taipei,China	5.3	1.2	10.8	8.6	24.1	95.7	82.0	60.6
Thailand	17.7	4.8	7.5	11.7	47.2	99.4	101.6	95.2
<b>Average<sup>5</sup></b>	<b>11.9</b>	<b>2.3</b>	<b>13.3</b>	<b>13.2</b>	<b>47.7</b>	<b>106.0</b>	<b>84.2</b>	<b>77.9</b>
<b>Median</b>	<b>10.5</b>	<b>2.1</b>	<b>12.4</b>	<b>13.3</b>	<b>45.4</b>	<b>99.4</b>	<b>88.6</b>	<b>73.9</b>
<i>Memo</i>								
eurozone	—	2.4	—	8.3	—	—	135.0	134.7
Japan	5.3	1.9	11.7	15.8	35.5	27.1	83.5	70.1
United States	1.1	5.4	9.4	11.7	146.4	58.3	111.5	109.1

— = data not available.

1. Data for commercial banks, except for Hong Kong, China (authorized institutions); Rep. of Korea (commercial and specialized banks); Singapore; Taipei,China; eurozone (banking system); Japan (major banks) and United States (all FDIC-insured institutions).
2. Data for commercial banks, except for People's Rep. of China in 2009 (banking system); Hong Kong, China (authorized institutions); India; Singapore; Taipei,China; eurozone (banking system); Rep. of Korea (commercial and specialized banks); Japan (major banks); and United States (all FDIC-insured institutions). Values for Rep. of Korea, Malaysia, Singapore, Taipei,China, Thailand and United States are Tier-1 capital to risk-weighted assets; and for the rest, total capital.
3. Data for commercial banks, except for India; Indonesia; Rep. of Korea; Singapore; Taipei,China; (banking system); Japan (major banks); and United States (all FDIC-insured institutions). Value for India in 2009 as of end-2008; Indonesia in 2009 as of April 2009; and Rep. of Korea and Japan in 2009 as of September 2009.
4. Data covers loans of the private sector or nonfinancial corporations; and deposits of banking institutions, other depository corporations, or deposit money banks.
5. Simple average.

Source: *Global Financial Stability Report (various years)* and *International Financial Statistics*, International Monetary Fund; CEIC database; and national sources.

**Table 2: Size and Composition of Financial Systems in Selected Asian Economies**  
(% of GDP)

	Financial Sector Assets <sup>1</sup>				Stock Market Capitalization <sup>2</sup>		Total Bonds Outstanding <sup>3</sup>	
	Deposit-taking Financial Institutions		Non-Bank Financial Institutions		2000	2009	2000	2009
	2000	2009	2000	2009				
China, People's Rep. of	157.2	200.6	5.1	5.8	48.9	82.7	16.9	52.3
Hong Kong, China	505.5	651.7	188.3	459.0	368.3	1,093.9	35.8	68.4
India <sup>4</sup>	64.5	103.5	15.6	29.0	69.9	205.2	24.6	48.8
Indonesia	63.6	34.7	8.7	11.4	16.2	39.8	31.9	18.2
Korea, Rep. of	130.5	158.6	41.9	67.3	27.8	100.3	66.6	122.7
Malaysia	154.2	211.5	41.4	99.9	120.6	149.5	73.3	96.5
Philippines	99.2	83.1	23.9	20.0	33.3	53.6	27.6	39.2
Singapore	646.3	643.7	76.6	83.9	167.3	271.7	48.0	84.7
Taipei, China	256.0	295.6	29.4	92.2	75.9	173.5	37.7	57.5
Thailand	132.3	146.6	10.7	41.1	23.8	67.1	25.3	67.0
<b>Average<sup>5</sup></b>	<b>221.0</b>	<b>253.0</b>	<b>44.2</b>	<b>92.0</b>	<b>95.2</b>	<b>223.7</b>	<b>38.8</b>	<b>65.5</b>
<b>Median</b>	<b>143.2</b>	<b>179.6</b>	<b>26.6</b>	<b>54.2</b>	<b>59.4</b>	<b>124.9</b>	<b>33.8</b>	<b>62.2</b>
<i>Memo</i>								
eurozone	230.9	315.6	157.8	214.5	79.6	56.5	87.9	114.4
Japan	510.8	541.8	274.7	291.3	67.6	69.7	97.4	189.6
United States	79.6	107.9	279.3	314.1	152.1	105.8	138.0	175.8

— = data not available.

1. Financial asset data for Indonesia as of end-2001 and end-2008.
2. Figures are computed using US dollar values of stock market capitalization and gross domestic product; except for China, People's Rep. of and India computed using local currency unit.
3. Data covers domestic debt securities. Figures for the United States exclude non-marketable government securities.
4. Financial sector assets data for India refers to the end of fiscal year.
5. Simple average.

Source: OREI staff calculations using data from national sources, CEIC, AsianBondsOnline, Bank for International Settlements, *World Economic Outlook Database*, International Monetary Fund, and World Federation of Exchanges.

**Table 3: Sovereign Wealth Funds in Developing Asia**

Economy	Name of Fund	Assets (USD billion)	Year of Inception
China, People's Rep. of	China Investment Corporation	200	2007
Hong Kong, China	Investment Portfolio (HKMA)	100	1998
India	to be named	N/A	N/A
Korea, Republic of	Korea Investment Corporation	20	2005
Malaysia	Khazanah Nasional BHD	15	1993
Singapore	Government of Singapore Investment Corporation	330	1981
Singapore	Temasek Holdings	100	1974
Taipei, China	National Stabilization Fund	15	2000
Thailand	to be named	N/A	N/A

Note: The list includes non-commodity sovereign wealth funds only.  
Source: Park and Rosanov (2010).

**Table 4: Compliance with International Financial Reporting Standards—Asia and the Pacific**

	Full Compliance	Compliance in Progress	Enacted	Intent Declared	No Compliance
<b>East and Southeast Asia</b>					
People's Rep. of China				✓	
Hong Kong, China			✓		
Indonesia				✓	
Republic of Korea				✓	
Japan				✓	
Malaysia				✓	
Philippines		✓			
Singapore				✓	
Taipei, China				✓	
Thailand				✓	
Viet Nam					✓
<b>South Asia</b>					
Bangladesh				✓	
India				✓	
Pakistan				✓	
Sri Lanka				✓	
<b>Central Asia</b>					
Kazakhstan			✓		
<b>The Pacific</b>					
Australia			✓		
New Zealand			✓		

Source: eStandards Forum.

**Table 5: International Financial Reporting Standards Gaps—Asia and the Pacific**

Countries	Standards Gap	Compliance Gap
<b>East and Southeast Asia</b>		
Cambodia	NAS were developed based on IAS 2002 (with some adaptations or modifications) but have not been expanded or updated for several years.	Gaps were noted in several areas including presentation of financial statements, impairment of losses, and disclosure of accounting policies.
People's Rep. of China	NAS and IFRS are generally comparable, except for standards related to reversal of impairment losses and disclosure of related party relationships. Full convergence with IFRS is expected by 2012.	Several FS reviewed showed high compliance. Examples of noncompliance found in classification of leases and disclosure of debt restructuring.
Indonesia	Convergence between NAS and IFRS was ongoing at the time the report was written; full adoption planned in 2008.	(compliance gap analysis not performed)
Republic of Korea	NAS are largely consistent with IFRS; main differences are on consolidation and absence of standard for special purpose entities. Full adoption of IFRS is mandatory for all listed FIs and selected unlisted FIs starting 2011.	Analysis indicated overall compliance with most standards, although scope of review only covered disclosure requirements.
Lao PDR	Significant differences between NAS and IFRS were observed. New standards are being developed based on IFRS 2003 but supporting legislation has not been issued.	FS reviewed largely complied with NAS.
Mongolia	No NAS—all entities are mandated to adopt and follow IFRS.	Most of FS analyzed do not meet IFRS requirements. Critical gaps were found in the areas of income taxes; valuation of property, plant, and equipment; and consolidation of FS, among others.
Philippines	Adoption of IFRS was completed in 2005, with minor changes.	Findings demonstrate incomplete or inadequate disclosure in some FS. Violations were found in areas such as submission of consolidated FS and disclosure of accounting policies and related party transactions.
Thailand	NAS are undergoing review and revision to reduce gap with IFRS.	Evidence of noncompliance were found in several areas including revenue recognition and FS consolidation.
<b>South Asia</b>		
Bangladesh	NAS were developed based on IAS but, as revisions were made, these were not updated and some IAS have no counterparts in the NAS.	Critical gaps were noted in FS consolidation, statement of changes in equity, and revenue recognition, among others.
India	NAS are broadly aligned with IAS but differences were observed in terms of scope and level of details. IAS not yet adopted are under review, except for IAS 29 (Financial Reporting in Hyperinflationary Economies) which was not deemed applicable in local ci	Compliance with standards has improved over the past decades but deviations were still observed. Noncompliance was noted in areas such as segment reporting and profit calculation for purposes of executive remuneration.
Pakistan	Most of applicable IFRS have been adopted, except IAS 29 and 41 (Agriculture).	Significant improvements were observed in recent years but violations were still found. Examples include noncompliance in terms of inventory valuation and disclosure and presentation of preference shares.

**Table 5: continued**

Countries	Standards Gap	Compliance Gap
Sri Lanka	NAS are largely aligned with IFRS although gaps exist due to nonadoption of certain IAS and introduction of an alternative method that is not allowed by IAS.	Improvements were noted but findings reveal several instances of compliance gaps, many related to disclosure requirements and related party transactions.
<b>Central Asia</b>		
Azerbaijan	Law which requires development and implementation of NAS based on IFRS was recently adopted at the time the report was written; development of new standards is still in nascent stages.	With respect to the review of FS which claim to abide by IFRS, evidence of noncompliance were noted particularly in FS prepared by the enterprise sector.
Georgia	IFRS or IFRS-based standards are recognized by law but late and poor translation of IFRS and override by regulators (e.g., in terms of tax accounting) led to differences in standards.	IFRS is compliance generally weak, although the level of compliance in the banking and insurance sectors was much better than in the enterprise sector.
Kazakhstan	Majority of NAS are based on an IFRS equivalent but significant deviations arise as some NAS have no IFRS equivalent and some areas addressed by IFRS are not covered by an equivalent NAS.	FS review showed general compliance with IFRS. Areas of noncompliance include determination of fair value of financial assets and liabilities and impairment of financial assets.
Kyrgyz Republic	Legal framework mandates that FS be prepared in accordance with IFRS but there is no provision for official translation, adoption, and publication of IFRS. The transition plan indicates that all local companies should use IFRS by 2009.	The quality of FS analyzed falls short of IFRS requirements, with some FS lacking notes to the accounts. Another source of variation from IFRS stems from differences in national regulation's treatment of loan loss allowances.
Tajikistan	All business entities are required to use IFRS by 2010.	The report only conducted compliance gap analysis against NAS; majority of IFRS have no equivalent in the local standards.
Uzbekistan	NAS are being developed based on IFRS but only standards which do not contradict with Uzbek civil, company, and tax laws are adopted. Banks follow a different set of standards issued by the central bank.	Evidence of noncompliance was found, especially in terms of preparation of explanatory notes and public availability of general purpose FS.
<b>The Pacific</b>		
Australia	IFRS adopted in 2005 but standards specific to local circumstances have been retained to deal with certain issues, including disclosure of director and executive remuneration and concise financial reports.	(compliance gap analysis not performed)
New Zealand	Companies required to apply IFRS starting 2007.	(compliance gap analysis not performed)

FI = financial institution, FS = financial statements, IAS = International Accounting Standards, IFRS = International Financial Reporting Standards, NAS = national accounting standards.

Note: IFRS are issued by International Accounting Standards Board, an independent accounting standard-setter based in London. In April 2001, IASB announced that it will adopt all IAS released by its predecessor, the International Accounting Standards Committee. IAS and IFRS are used interchangeably in this table.

The sample size of ROSCs is very limited so assessments should not be considered representative of overall compliance.

Source: World Bank, *Report on the Observance of Standards and Codes* (various countries). International Monetary Fund, *Financial System Stability Assessment* (for Australia and New Zealand). Latest reports available as of 10 August 2010 were used.

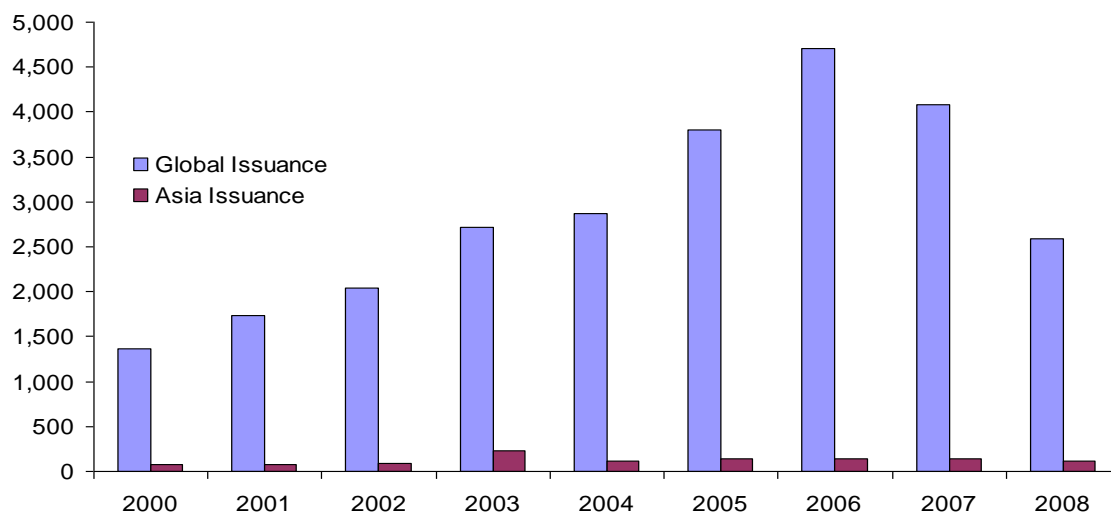


**Table 6: Compliance with Core Principles for Effective Banking Supervision—Asia and the Pacific**

	Full Compliance	Compliance in Progress	Enacted	Intent Declared	No Compliance	Insufficient Information
<b>East and Southeast Asia</b>						
People's Rep. of China				✓		
Hong Kong, China		✓				
Indonesia			✓			
Republic of Korea						✓
Japan						✓
Malaysia						✓
Philippines				✓		
Singapore		✓				
Taipei, China						✓
Thailand			✓			
Viet Nam						✓
<b>South Asia</b>						
Bangladesh						✓
India			✓			
Pakistan		✓				
Sri Lanka						✓
<b>Central Asia</b>						
Kazakhstan			✓			
<b>The Pacific</b>						
Australia		✓				
New Zealand		✓				

Source : eStandards Forum.

**Figure 1: Private-Label Securitization Issuance (USD billion)**



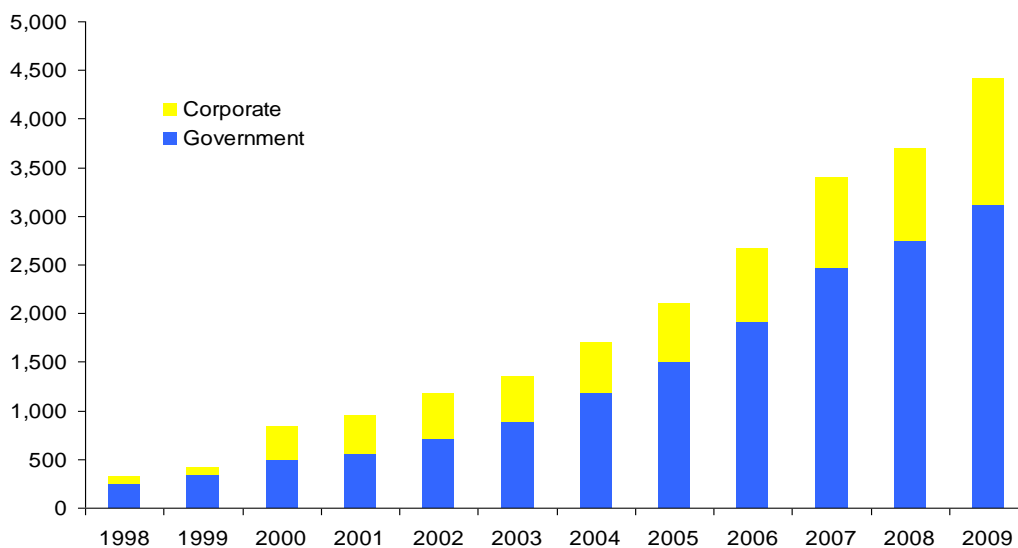
Note: Data includes asset-backed commercial paper, asset-backed security (ABS), collateralized debt obligation (CDO), mortgage-backed security (MBS) and CDOs backed by CDO, ABS, and MBS.

Global issuance covers Australia, Canada, Europe, Japan, Republic of Korea, Latin America, United States and other emerging markets.

Asia issuance includes Japan and the Republic of Korea.

Source: *Global Financial Stability Report October 2009*, International Monetary Fund.

**Figure 2: Total Government and Corporate Bonds Outstanding—East Asia (USD billion)**



Note: East Asia includes People's Rep. of China; Hong Kong, China; Indonesia; Republic of Korea; Malaysia; Philippines; Singapore; Thailand; and Viet Nam.

Source: AsianBondsOnline.

**Appendix: Progress of Selected Features of the G-20 Financial Regulatory Reform Agenda**

Issue	Commitments			Status
	Washington Summit	London Summit	Pittsburgh Summit	
International Cooperation	Establishment of supervisory colleges for all major cross-border financial institutions to strengthen surveillance of cross-border firms.			Supervisory colleges established in more than 30 large, complex financial institutions identified as requiring college arrangements. Roles and effectivity of operations undergoing review by FSB [Sept. 09].
	Strengthened cross-border crisis management arrangements. Review of resolution regimes and bankruptcy laws to allow orderly wind-down of large and complex cross-border financial institutions.	Immediate implementation of FSB Principles for Cross-Border Cooperation on Crisis Management.	(no new commitments)	Firm-specific, cross-border contingency planning discussions held to discuss contingency funding and de-risking [Sept. 09].  FSB to draft common principles to facilitate greater consistency among national resolution frameworks and to strengthen coordination of resolution measures; need for some national discretion to give authorities space to tailor regulatory and supervisory actions to domestic conditions acknowledged [Jun. 10].  Key recommendations on cross-border bank resolution issued by BCBS for implementation [Jun. 10].
		Conduct of early warning exercises to identify and report on build up of macroeconomic and financial risks and recommend actions to address them.		Second iteration of the Early Warning Exercise conducted and presented to the International Monetary and Financial Committee [Sept. 09].

**Appendix continued**

Issue	Commitments			Status
	Washington Summit	London Summit	Pittsburgh Summit	
Prudential Regulation	Development of policies to better manage liquidity risk in financial institutions.	Development of a global framework for promoting stronger liquidity buffers in financial institutions (including cross-border institutions). Implementation of measures to mitigate procyclicality, which requires banks to build buffers they can draw from when market conditions worsen.	(no new commitments)	BCBS to prepare in time for the Seoul Summit calibrated proposals for new regulatory framework, which includes raising the quantity, quality, consistency, and transparency of the Tier 1 capital base; strengthen risk coverage of capital framework; introduction of leverage ratio as a supplementary measure to the risk-based requirements; and introduction of a global minimum liquidity standard [Jun. 10].
	Standardization of definitions of capital to achieve consistent measures of capital and capital adequacy.	Progressive adoption of Basel II capital framework by all member countries.	Drafting of rules to discourage excessive leverage and improve of the quality, quantity, and international consistency of capital in the banking system (action to be taken once recovery sets in).	BCBS proposed additional requirements to strengthen capital treatment and risk management requirements of structured products [Dec. 09].  All member countries will adopt new Basel II standards with aim of implementation by end-2012 [Jun. 10].
			Conduct of robust, transparent stress tests for banks, where needed.	EU to publicly release results of ongoing stress test on European banks [Jun. 10].

**Appendix *continued***

Issue	Commitments			Status
	Washington Summit	London Summit	Pittsburgh Summit	
Scope of Regulation	Reduction of systemic risks of credit default swaps (CDS) and OTC derivatives transactions and stronger efforts toward standardization and resilience of credit derivatives markets.	(no new commitments)	(no new commitments)	Major derivatives dealers committed to achieve specific target levels for central clearing of OTC credit derivatives by end-October 2009 and OTC interest rate derivatives by end-December 2009. CDS standardization moving forward with publication of supplements to the ISDA's 2003 Credit Derivatives Definitions. OTC Derivatives Regulators' Forum close to finalizing an international cooperative oversight framework for the global CDS trade repository [Nov. 09].
	Review of the scope of financial regulation, focusing on institutions, instruments, and markets that are currently unregulated.	Creation of guidelines to determine whether a financial institution, market, or instrument is systematically important. Expansion of regulation and oversight to all systemically important financial institutions (SIFIs), instruments, and markets.	(no new commitments)	IMF, BIS, and FSB submitted guidelines on how national authorities can assess the systemic importance of financial institutions, markets, or instruments [Nov. 09].  FSB to develop concrete policy recommendations to address problems associated with SIFIs (particularly moral hazard problems) by the Seoul Summit [Jun. 10].  FSB considering additional prudential requirements for SIFIs, such as capital and/or liquidity surcharges and use of contingent capital [Jun. 10].
		Registration of hedge funds or their managers and	(no new commitments)	Legislation to establish registration, reporting, and oversight arrangements

**Appendix continued**

Issue	Commitments			Status
	Washington Summit	London Summit	Pittsburgh Summit	
Scope of Regulation	Review of the scope of financial regulation, focusing on institutions, instruments, and markets that are currently unregulated.	disclosure of relevant information to evaluate systemic risks.		for hedge funds/advisers advancing in major jurisdictions, notably the EU and US [Jun. 10].
		Establishment of central clearing counterparties to promote standardization and resilience of credit derivatives markets	Trading of all standardized OTC derivative contracts on exchanges or electronic platforms, where appropriate, and clearance through central counterparties (CCPs). OTC derivative contracts should be reported to trade repositories.	Guidance on application of existing CCP standards and establishment of trade repositories in OTC derivatives markets published for comments by CPSS and IOSCO [Jun. 10].
Transparent Assessment of Regulatory Regimes	Review and submission of Financial Sector Assessment Program (FSAP) report on each member country's regulatory system.	(no new commitments)	(no new commitments)	FSB members to undergo FSAP assessment every five years, participate in thematic and peer reviews, and publish results of these assessments [Jun. 10]. Furthermore, members are also subject to assessment through Reports on the Observance of Standards and Codes (ROSC) [Nov. 09].
Compensation	Avoidance (through voluntary effort or regulatory action) of compensation packages which reward excessive short-term returns or risk taking.	Implementation of FSB's new principles on compensation; BCBS should integrate these principles into their risk management guidance. Assessment of firms' compensation policies, with application of necessary disciplinary actions which	(no new commitments)	FSB found considerable progress across the board with regard to implementation of its principles and standards on compensation. Further recommendations include enhanced supervisory cooperation on compensation with regard to cross-border firms, support in the development of sound industry practices especially in the area of risk-

**Appendix *continued***

Issue	Commitments			Status
	Washington Summit	London Summit	Pittsburgh Summit	
Compensation	Avoidance (through voluntary effort or regulatory action) of compensation packages which reward excess short-term returns or risk taking.	can include increased capital requirement.		<p>adjustment of compensation, and increased coverage of significant nonbank financial institutions [Jun. 10].</p> <p>BCBS incorporated FSB Principles in Pillar 2 of Basel II [Nov. 09].</p>
Tax Havens and Non-Cooperative Jurisdictions	Continuation of FATF's work against money laundering and terrorist financing.	Strengthened compliance with international standards in prudential, tax, and anti-money laundering/terrorist financing.	(no new commitments)	<p>Public statement on jurisdictions with strategic deficiencies issued by FATF [Feb. 10].</p> <p>Global Forum on Tax Transparency and Exchange of Information (Global Forum) launched peer review process and developed multilateral mechanisms for information exchange [Apr. 10].</p> <p>All 87 jurisdictions covered by Global Forum have committed to standards of tax information exchange and transparency, with more than half having substantially implemented them [Nov. 09].</p>
	Promotion of tax information exchange.	Identification of non-cooperative jurisdictions (with regard to standards in tax transparency) and implementation of disciplinary action as necessary.		
Accounting Standards	Improvement of valuation standards, accounting and disclosure standards for off-balance sheet vehicle, and disclosure of complex financial instruments by firms to market participants.	Improvement of accounting recognition of loan-loss provisions by incorporating a broader range of credit information.	(no new commitments)	<p>Progress in FSB recommendations on impairment of financial assets, derecognition, addressing valuation uncertainty in fair value measurement guidance, and netting/offsetting of financial instruments [Jun. 10].</p> <p>Final standard on fair value measurement expected in 2010 [Nov. 09].</p>

**Appendix continued**

Issue	Commitments			Status
	Washington Summit	London Summit	Pittsburgh Summit	
Accounting Standards	Creation and consistent application and enforcement of a single set of quality global standards.	(no new commitments)	International accounting bodies should heighten efforts to achieve a single set of global accounting standards by June 2011.	IFRSs and US GAAP to converge the greatest extent possible by June 2011 [Nov. 09]. Most FSB members have either adopted IASB standards or have programs underway to converge with or consider adoption of IASB standards by 2012 [Jun. 10].
Credit Rating Agencies (CRAs)	CRAs should satisfy standards set by the international organization of securities regulators, provide greater disclosure to investors and to issuers, and differentiate ratings for complex products.	CRAs should differentiate ratings for structured products and provide full disclosure of their ratings track record and the information and assumption that underpin the ratings process.	(no new commitments)	CRAs under IOSCO review working to incorporate IOSCO CRA Code provisions into their codes of conduct [Mar. 09]. National and regional initiatives ongoing or underway to strengthen oversight of CRAs; US, EU, and Japan have entered into discussions to resolve any significant inconsistencies that may surface from their new CRA regulations [Jun. 10].
		Regulatory oversight of all CRAs whose ratings are used for regulatory purposes and compliance with the IOSCO code.	(no new commitments)	BCBS to address inappropriate incentives caused by use of external ratings in the regulatory capital framework (to avoid "cliff" effects).  National and regional authorities also taking or considering steps to lessen undue reliance on ratings in rules and regulations [Jun. 10].

BCBS = Basel Committee on Banking Supervision; BIS = Bank for International Settlements; CPSS = Committee on Payment and Settlement Systems; EU = European Union; FATF = Financial Action Task Force on Money Laundering; FSB = Financial Stability Board; GAAP = Generally Accepted Accounting Principles; IASB = International Accounting Standards Board; IFRSs = International Reporting Financial Standards; IMF = International Monetary Fund; IOSCO = International Organization of Securities Commissions; ISDA = International Swaps and Derivatives Association, Inc.; OTC = over the counter; US = United States.

Sources: Group of Twenty, *Declaration: Special Leaders Summit on the Financial Situation, Action Plan for Recovery and Reform, Statement: G-20 Summit Pittsburgh, and Communique: G-20 Summit Toronto*. US Chair of the Pittsburgh G-20 Summit, *Progress Report on the Actions to Promote Financial Regulatory Reform*. UK Chair of the London G-20 Summit, *Progress Report on the Economic and Financial Actions of the London, Washington, and Pittsburgh G-20 Summits*. Financial Stability Board, *Overview of the Progress in the Implementation of the G-20 Recommendations for Strengthening Financial Stability*.



## References

- D. Arner and L. Schou-Zibell. 2010. Responding to the Global Financial and Economic Crisis: Meeting the Challenges in Asia. *ADB Working Paper Series on Regional Economic Integration*. Manila: Asian Development Bank. Forthcoming.
- Asian Bonds Online. Regional Dataset. <http://asianbondsonline.adb.org/regional> (accessed May 2010).
- ADB. 2010. *Asia Capital Markets Monitor 2010*. Manila.
- Basel Committee on Banking Supervision (BCBS). 2009a. Consultative Document: Strengthening the Resilience of the Banking Sector. December. <http://www.bis.org/publ/bcbs164.pdf>
- . 2009b. *Consultative Document: International Framework for Liquidity Risk Measurement, Standards, and Monitoring*. December. <http://www.bis.org/publ/bcbs165.pdf>
- . 2010. *The Joint Forum. Review of the Differentiated Nature and Scope of Financial Regulation: Key Issues and Recommendations*. January. [http://www.bis.org/publ/joint24.pdf?noframes=1&bcsi\\_scan\\_7823DFCE46415F3E=0&bcsi\\_scan\\_filename=joint24.pdf](http://www.bis.org/publ/joint24.pdf?noframes=1&bcsi_scan_7823DFCE46415F3E=0&bcsi_scan_filename=joint24.pdf)
- eStandards Forum. Standards Compliance Chart. <http://www.estandardsforum.org> (accessed August 2010).
- Financial Stability Board (FSB). 2010a. *Financial Stability Board Framework for Strengthening Adherence to International Standards*. 9 January. [http://www.financialstabilityboard.org/publications/r\\_100109a.pdf](http://www.financialstabilityboard.org/publications/r_100109a.pdf)
- . 2010b. *Thematic Review on Compensation: Peer Review Report*. 30 March. [http://www.financialstabilityboard.org/publications/r\\_100330a.pdf](http://www.financialstabilityboard.org/publications/r_100330a.pdf)
- . 2010c. *Progress since the St. Andrews Meeting in Implementing the G-20 Recommendations for Strengthening Financial Stability: Report of the Financial Stability Board to G-20 Finance Ministers and Governors*. 19 April. [http://www.financialstabilityboard.org/publications/r\\_100419.pdf?bcsi\\_scan\\_7823DFCE46415F3E=0&bcsi\\_scan\\_filename=r\\_100419.pdf](http://www.financialstabilityboard.org/publications/r_100419.pdf?bcsi_scan_7823DFCE46415F3E=0&bcsi_scan_filename=r_100419.pdf)
- . 2010d. *Ongoing and Recent Work Relevant to Sound Financial Systems: Cover Note by the Secretariat for the FSB Meeting on 14 June 2010*. [http://www.financialstabilityboard.org/publications/on\\_1006.pdf?bcsi\\_scan\\_7823DFCE46415F3E=0&bcsi\\_scan\\_filename=on\\_1006.pdf](http://www.financialstabilityboard.org/publications/on_1006.pdf?bcsi_scan_7823DFCE46415F3E=0&bcsi_scan_filename=on_1006.pdf)
- . 2010e. *Overview of Progress in the Implementation of the G20 Recommendations for Strengthening Financial Stability: Report of the Financial*

- Stability Board to G-20 Leaders*. 18 June. [http://www.financialstabilityboard.org/publications/r\\_100627c.pdf](http://www.financialstabilityboard.org/publications/r_100627c.pdf)
- Group of Thirty. 2009. *Financial Reform: A Framework for Financial Stability*. <http://group30.org/pubs/reformreport.pdf>
- Group of Twenty (G-20). 2008. *Declaration: Summit on Financial Markets and the World Economy*. Washington, D. C. 14-15 November. [http://www.g20.org/Documents/g20.org/Documents/g20\\_summit\\_declaration.pdf](http://www.g20.org/Documents/g20.org/Documents/g20_summit_declaration.pdf)
- . 2009a. *Leaders Statement: The Global Plan for Recovery and Reform*. London, UK. 2 April. <http://www.g20.org/Documents/final-communique.pdf>
- . 2009b. *Leaders' Statement: The Pittsburgh Summit*. Pittsburgh, US. 24-25 September. [http://www.g20.org/Documents/pittsburgh\\_summit\\_leaders\\_statement\\_250909.pdf](http://www.g20.org/Documents/pittsburgh_summit_leaders_statement_250909.pdf)
- . 2010a. *Communiqué: Meeting of Finance Ministers and Central Bank Governors*. Busan, Republic of Korea. 5 June. [http://www.g20.org/Documents/201006\\_Communique\\_Busan.pdf](http://www.g20.org/Documents/201006_Communique_Busan.pdf)
- . 2010b. *The G-20 Toronto Summit Declaration*. Toronto, Canada. 25-27 June. [http://www.g20.org/Documents/g20\\_declaration\\_en.pdf](http://www.g20.org/Documents/g20_declaration_en.pdf)
- International Monetary Fund. *Financial System Stability Assessment*. various issues.
- . *Global Financial Stability Report*. various years.
- . International Financial Statistics Online. <http://www.imf.org/external/data.htm> (accessed July 2010).
- . World Economic Outlook Database. <http://www.imf.org/external/data.htm> (accessed July 2010).
- International Monetary Fund, Bank for International Settlements, and Financial Stability Board. 2009. *Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations—Report to the G-20 Finance Ministers and Central Bank Governors*. October. <http://www.bis.org/publ/othp07.htm>
- International Working Group of Sovereign Wealth Funds (IWG). 2008. *Sovereign Wealth Funds: Generally Accepted Principles and Practices ("Santiago Principles")*. October. <http://www.iwg-swf.org/pubs/eng/santiagoprinciples.pdf>
- C. S. Lee and C-Y. Park. 2009. *Beyond the Crisis: Financial Regulatory Reform in Emerging Asia*. *ADB Working Paper Series on Regional Economic Integration*. No. 34. Manila: Asian Development Bank.

- J-W. Lee and C-Y. Park. 2008. Global Financial Turmoil: Impact and Challenges for Asia's Financial Systems. *Asian Economic Papers*. 8 (1). pp. 9–40.
- Q. Liu, D. Arner and P. Lejot. 2011. *Finance in Asia: Institutions, Markets and Regulation*. Oxford: Routledge. Forthcoming.
- D. Park and A. Rozanov. 2010. Asia's Sovereign Wealth Funds and Reform of the Global Reserve System. In J. D. Sachs, M. Kawai, J-W. Lee, and W.T. Woo, eds. *The Future Global Reserve System—An Asian Perspective*. Available at: <http://aric.adb.org/grs/papers/Park.pdf>
- C. Reinhart and K. Rogoff. 2009. *This Time is Different: Eight Centuries of Financial Folly*. Princeton: Princeton University Press.
- UK Chair of the London G-20 Summit. 2009. *Progress Report on the Economic and Financial Actions of the London, Washington, and Pittsburgh G-20 Summits*. [http://www.g20.org/Documents/20091107\\_progress\\_report\\_standrews.pdf](http://www.g20.org/Documents/20091107_progress_report_standrews.pdf)
- United Nations. 2009. Report of the Commission of Experts of the President of the United Nations General Assembly on Reforms of the International Monetary and Financial System. 21 September. [http://www.un.org/ga/president/63/PDFs/report\\_ofexperts.pdf?bcsi\\_scan\\_7823DFCE46415F3E=0&bcsi\\_scan\\_filename=reportofexperts.pdf](http://www.un.org/ga/president/63/PDFs/report_ofexperts.pdf?bcsi_scan_7823DFCE46415F3E=0&bcsi_scan_filename=reportofexperts.pdf)
- US Chair of the Pittsburgh G-20 Summit. *Progress Report on the Actions to Promote Financial Regulatory Reform*. 25 September. [http://www.g20.org/Documents/pittsburgh\\_progress\\_report\\_250909.pdf](http://www.g20.org/Documents/pittsburgh_progress_report_250909.pdf)
- World Bank. Report on the Observance of Standards and Codes. various issues.
- World Federation of Exchanges. WFE Database. <http://www.world-exchanges.org/> (accessed July 2010).

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## **Global Financial Regulatory Reforms: Implications for Developing Asia**

The objective of global regulatory reform is to build a resilient global financial system that can withstand shocks and dampen their effects on the real economy. Lessons drawn from the global financial crisis have led to specific reform proposals. Yet, these proposals have raised concerns of relevance to Asia's developing economies. In this paper, the authors argue that global reforms should be complemented and augmented by national and regional reforms, taking into account the very different characteristics of emerging Asian financial systems from advanced economies.

### **About the Asian Development Bank**

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two-thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.