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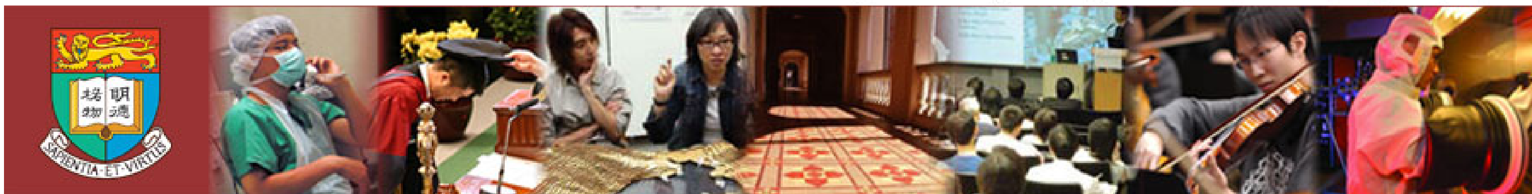

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Responding to the Global Financial and Economic Crisis: Meeting the Challenges in Asia

Douglas W. Arner and Lotte Schou-Zibell

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Asian Development Bank

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Responding to the Global Financial and Economic Crisis: Meeting the Challenges in Asia

Douglas W. Arner[+] and Lotte Schou-Zibell[++]

No. 60 | October 2010

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Asian Development Bank

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Abstract

The global financial and economic crisis marks an important turning point for finance and the Asian growth model. Regional consensus is now supporting economic rebalancing away from the dominant focus on exports to developed markets and towards more a more balanced economic structure supported by domestic and regional financial development. In relation to finance, the crisis highlights the necessity of addressing a range of issues across the region. First, Asian approaches to financial liberalization, prudential regulation, and financial innovation are likely to be closely considered around the world. At the same time, while the region has not been at the center of the global crisis—in contrast to the Asian financial crisis of 1997/98—it nonetheless provides an important opportunity to strengthen domestic and regional financial regulation. Second, beyond the post-crisis issues, and the prevention of systemic risk in particular, finance must continue to play a central role in supporting economic development and poverty reduction across the region. While the global crisis has highlighted once again the risks of finance, a central objective across Asia must be financial sector development to support economic growth and development. Third, in addition to domestic reform, the crisis provides an opportunity to enhance the international financial architecture, not only to improve its efficacy, but also to enhance the role of empowered Asian economies in global fora and institutions. At the same time, weaknesses in the international financial architecture suggest the need for Asian regional alternatives to address liquidity, liberalization, regulation, and exchange rate volatility.

Keywords: Global financial crisis, Group of 20, systemic risk, financial sector development

JEL Classification : G01, G15, G17, G18, G24, G28, G32, G33, G34, G35, G38

1. Introduction

From the 1950s to the 1980s, individual economies in Asia adopted a range of models to support economic growth and development. These ranged from Soviet-derived models of state ownership and control to liberal *laissez-faire*, with approaches to finance varying from model to model. Of the various models adopted by the end of the 1980s, the Japanese model of the developmental state with administrative direction of finance had proven the most successful in supporting balanced and inclusive economic growth and development. In variations of this model adopted sequentially across most East Asian jurisdictions, economic growth derived from an export-led strategy, based on close relationships between government, business, and finance—with finance largely emanating from banks and to a lesser extent equity finance from minority shareholder structures. [1] During this period, economic regionalism, generally, and financial regionalism, especially, were very limited, with Asian economies focusing primarily on their relations with developed Western markets and financial systems.

During the 1990s, Asian economies focused on increasing integration with the global economy and financial system, adopting Washington Consensus policies supporting economic and financial liberalization. In addition, economic interactions within the region, especially trade and investment, began to increase. At the same time, the role of finance in the Asian growth model set the stage for the Asian financial crisis of 1997/98.

The Asian financial crisis marked an important turning point in the role of finance in most Asian economies, given the failure of the model of finance developed in the context of the Japanese-inspired model of the developmental state and at the same time a rejection of rapid financial liberalization. The Asian financial crisis marked the beginning of significant economic and financial regionalism in East Asia,[2] as economies looked to common interests not appropriately addressed through the existing international financial architecture, specifically, rejecting involvement with the International Monetary Fund (IMF). During the following decade, Asian economies continued to focus on export-led growth, but now combined it with gradual financial liberalization, regional cooperation on issues of common concern, and accumulation of defensive foreign exchange reserves.

The global financial and economic crisis which commenced in 2007 marks another important turning point in Asia's development. In the wake of the crisis—with its main impact in the region to date resulting from the collapse in trade to developed markets in 2008/09—regional consensus has shifted to support economic rebalancing away from strategies dominated by exports to Europe and the United States (US), and towards more balanced domestic economies and economic relationships regionally and internationally. In addition, consensus now exists to enhance domestic and regional financial development to maximize the developmental benefits of savings resources generated in the region.

In Asia, the global financial crisis highlights the necessity of addressing a range of issues relating to finance. First, regarding financial stability, the crisis holds important lessons and presents significant opportunities for enhancing financial regulation in the region. At

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[1] For discussion, see Liu, Arner, and Lejot (Forthcoming).

[2] See Arner, Lejot, and Wang (2009).

the same time, the global crisis highlights the potential for greater Asian leadership in regulatory issues, based on the relative success of more conservative Asian approaches compared to those of the US and the United Kingdom (UK). In this context, Asian approaches to liberalization, prudential regulation, and financial innovation are likely to be closely considered around the world. Second, in relation to financial sector development, Asian financial systems, despite having developed significantly since the Asian financial crisis, retain considerable scope for development—a necessity in the context of effectively allocating regional financial surpluses to support domestic and regional development and economic rebalancing. While developmental needs are pronounced in some economies, all economies in the region would benefit from greater focus on improving underlying financial infrastructure. Third, in addition to domestic and regional considerations, the crisis provides an opportunity to enhance the international financial architecture, not only to improve its efficacy, but also to enhance the role of empowered Asian economies in global fora and institutions, such as the IMF, Group of 20 (G20), and Financial Stability Board (FSB). At the same time, weaknesses in the international financial architecture suggest the need for continued development of Asian regional alternatives to address issues including liquidity, liberalization, regulation, and exchange rate volatility. At the same time, recent experiences in the European Union (EU), especially the euro area, highlight the importance of carefully considering potential weaknesses and risks in regional financial arrangements.

Sections 1 and 2 provide an overview of the global financial crisis and G20 and regional responses. From this basis, sections 3, 4, 5, and 6 address the "four pillars" of the G20 financial reform process and their implications for Asia: (i) financial regulation and infrastructure (section 3), (ii) financial supervision (section 4), (iii) systemically important financial institutions and financial institution resolution (section 5), (iv) and implementation of international standards (section 4). Section 7 turns to an issue of particular importance to the region: financial sector development to support growth and address imbalances. Section 8 discusses reforms to the international financial architecture and argues for the development of effective and complementary regional financial architecture. Section 9 looks forward to challenges and policy options for the region.

2. The Global Financial and Economic Crisis: Implications for Finance in Asia

In essence, the global financial crisis resulted from an unprecedented period of excessive borrowing, lending, and investment incentivized by a series of significant economic and regulatory factors.[3] Excesses in borrowing and lending most directly arose in the context of the market for subprime residential mortgages in the US, especially during 2005 and 2006. However, over-borrowing and over-lending were prevalent in virtually all asset classes globally, including commercial real estate, corporate lending (especially for mergers and acquisitions, and private equity transactions), commodities, and international equities (especially emerging markets). These excesses were not limited to the US; they were truly global, impacting almost every market and asset class.

[3] For detailed discussion, see Group of 30 (2009); de Larosière et al (2009); Financial Services Authority (UK) (2009); Arner (2009).

This broad-based borrowing and lending surge was fuelled by over-investment from a wide range of investors around the world.

Borrowing, lending, and investment were inextricably interconnected through a range of transaction structures derived from well understood techniques of securitization—the transmission mechanism between borrowing, lending, and investment.[4] In its basic form, securitization is a transaction structure in which loans, such as loans secured by residential real estate (i.e. mortgages), are pooled together, or repackaged, as collateral underlying the issuance of (predominantly debt) securities. At its simplest, securitization makes a great deal of sense since it allows the distribution of risks to a wider pool of investors, thereby reducing the cost of borrowing for ultimate borrowers and reducing the risk to lenders of defaults on underlying loans. At the same time, however, the structure has the potential to provide significant incentives for abuse, including excessive complexity and financialization, which is essentially a disassociation between financial and real economic activity). These distorted incentives in many ways lie at the heart of the global financial crisis. In the US, in particular, loans came to be made not by banks with an on-going interest in their repayment, but instead by non-regulated specialists—mortgage brokers for real estate and a range of financial institutions, especially investment banks, for corporate loans—intent on profiting from charging to arrange loans. In the extreme form of the originate-and-distribute model of finance, which became common at the beginning of the 21st century, there was no intention of maintaining an interest in the ability of the borrower to repay in the future.

Securitization was thus the central linkage between investment in credit securities and borrowing and lending. Such investment was largely the result of two economic factors: (i) the period of low interest rates in Japan in the wake of the onset of its banking crisis at the beginning of the 1990s and in the US following the bursting of the dotcom bubble in 2001, and (ii) the imbalances in saving and investment between the Anglo-American economies, especially the US and UK, and the rest of the world, especially Japan, the People's Republic of China (PRC), and the major oil-producing economies such as Russia and Saudi Arabia, largely resulting from accumulation of foreign exchange reserves in the wake of experiences during the Asian financial crisis of 1997/98. The combination of low interest rates and large volumes of investment funds from outside the US and the UK supported massive investment in debt securities in New York and London designed to produce an appealing combination of perceived safety and attractive yields.

In addition to issues which arose in the context of relatively simple securitization transactions, the technology of securitization was expanded over the decade preceding the global financial crisis to encompass a range of ever-more complex techniques and structures, including structured investment vehicles (SIVs) and conduits to purchase mass-produced structured investment products, collateralized debt obligations (CDOs), collateralized loan obligations (CLOs), synthetic securitizations, and a range of other exotics such as CDOs and synthetic CDOs. Many of these took the technology of securitization—the pooling of portfolios of risks, off-balance sheet structures, capital markets funding—and combined it with that of over-the-counter (OTC) derivatives, especially credit derivatives such as credit default swaps (CDS). While the complexities inherent in such transaction structures in hindsight may seem an obvious source of risk,

[4] For detailed discussion, see Lejot, Arner, and Schou-Zibell (2008).

in fact, in the period leading up to the global financial crisis such techniques received important support and developmental incentives from regulators around the world. This combination of complexity, financialization, misaligned regulatory incentives and failures, corporate governance and risk management deficiencies, abundant liquidity, and massive global investor demand set the stage for the crisis.

Following interest rate increases in major markets and peaks in the US residential real estate market and resultant gradual shifts in market sentiment, the complex transmission mechanisms at the heart of the financial excesses preceding the onset of the global financial crisis ceased to function. As a result of the lack of transparency resulting from complexity and risk distribution, a cycle of adverse selection, loss of confidence, changes in market psychology and investor preferences amongst wholesale market participants combined to produce a closure of the primary interbank funding mechanisms in the global financial markets, eventually leading to the failure of significant international financial institutions around the world. Complexity and lack of transparency in relation to financial markets, institutions and products, moral hazard, and improperly designed financial infrastructure and regulatory systems hindered appropriate responses. Following coordinated international action in 2008/09 to address systemic financial issues, in 2010, questions arose with respect to both future growth prospects in the US and EU as well as structural weaknesses in euro area monetary and fiscal systems, resulting in a new phase of the crisis, currently expressed in continuing concerns regarding growth prospects and fiscal and financial sustainability in developed economies.

2.1 International Responses

At the international level, the G20 has assumed the leading role in coordinating responses and reforms. In addressing the causes and necessary responses to the global financial crisis, in November 2008, the leaders of the G20 established five main principles to guide reforms: (i) strengthening transparency and accountability, (ii) enhancing sound regulation, (iii) promoting integrity in financial markets, (iv) reinforcing international cooperation, and (v) reforming the financial architecture. For each of these five principles, the G20 established a detailed action plan, incorporating both immediate- and medium-term actions. The detailed action plan established the core content of the refinements to international financial regulatory standards, which are now taking place through fora such as the FSB and the Basel Committee on Banking Supervision (BCBS). G20 leaders tasked their respective finance ministers to give highest priority to six areas: (i) mitigating against pro-cyclicality in regulatory policy; (ii) reviewing and aligning global accounting standards, particularly for complex securities, (iii) strengthening the resilience and transparency of credit derivatives markets and reducing their systemic risks, including by improving the infrastructure of the OTC markets; (iv) reviewing compensation practices as they relate to incentives for risk-taking and innovation; (v) reviewing the international financial architecture, and (vi) defining the scope of systemically important financial institutions and determining their appropriate regulation and oversight.

In April 2009, G20 leaders pledged to do whatever is necessary to (i) restore confidence and growth; (ii) repair the financial system; (iii) strengthen financial regulation; (iv) fund and reform international financial institutions; (v) reject protectionism and promote global trade and investment; and (vi) build an inclusive, green, and sustainable recovery. In

relation to financial regulation and supervision, the leaders committed to build a stronger, more-globally-consistent supervisory and regulatory framework for the future financial sector to support sustainable growth and serve the needs of business and citizens. In September 2009, the G20 reiterated their support for existing initiatives and committed to continuing implementation of agreed actions.

In June 2010, G20 leaders refocused attention on financial sector reform under a four pillar structure and further developed principles relating to balanced growth, with the next leaders meeting in the Republic of Korea (Korea) in November 2010 being set to review progress not only in relation to regulatory issues, but also with respect to reform of the international financial architecture. The four pillars include (i) a strong regulatory framework, (ii) effective supervision, (iii) resolution of and addressing systemically important financial institutions, and (iv) transparent international assessment and peer review.[5]

For Asia, the key lessons of the crisis include the need to enhance mechanisms to address economic and financial stability, rebalance economies towards greater domestic consumption, promote regional trade and investment, and establish more effective domestic and regional financial systems. In looking to financial regulation, the G20 response provide the initial framework of analysis not only for Asian G20 members but more broadly as well. As the foundation, G20 leaders agreed that regulation and supervision must be designed to achieve a series of specific objectives: (i) promote propriety, integrity, and transparency; (ii) guard against risk across the financial system; (iii) dampen rather than amplify financial and economic cycles; (iv) reduce reliance on inappropriately risky sources of financing; and (v) discourage excessive risk-taking.

In addressing financial regulation objectives, the leaders initially focussed on five major areas. First, in relation to international cooperation and financial standards, the Financial Stability Forum (FSF) was renamed and reconstituted as the FSB which includes all G20 countries, former FSF members, Spain, and the European Commission.[6] In relation to surveillance, the FSB and IMF were directed to develop appropriate early macroeconomic and financial warning systems. In addition, the G20 committed to take action against non-cooperative jurisdictions, including tax havens.[7] Second, in relation to the scope of regulation, leaders committed to reshaping regulatory systems to address macroprudential risks; extend regulation to all systemically important financial institutions, instruments, and markets, including systemically important hedge funds; and reform regulation and supervision of credit rating agencies. Third, in relation to corporate governance, the leaders endorsed new principles on pay and compensation,[8] and committed to supporting sustainable compensation schemes and the corporate social responsibility of all firms. The result is the basis of a globally agreed approach to

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[5] G20 (2010).

[6] See Arner and Taylor (2009). Eight Asian economies are now also represented on the FSB: Reserve Bank of Australia and the Treasury (Australia); People’s Bank of China, China Banking Regulatory Commission, Ministry of Finance (PRC); Hong Kong Monetary Authority (Hong Kong, China); Reserve Bank of India, Securities and Exchange Board of India, Ministry of Finance (India); Bank Indonesia (Indonesia); Bank of Japan, Financial Services Agency, Ministry of Finance (Japan); Bank of Korea, Financial Services Commission (Korea); and Monetary Authority of Singapore (Singapore).

[7] See OECD (2009).

[8] FSF (2009d).

financial sector compensation and its regulation—potentially one of the most far-reaching consequences of the crisis. Fourth, in relation to prudential regulation, in the context of eventual recovery, which is now taking hold in Asia, G20 leaders agreed to improve the quality, quantity, and international consistency of capital, including regulation to prevent excessive leverage and requirements for buffers of resources to be built-up in good times. Fifth, in relation to transparency, the G20 called on accounting standard setters to improve standards on valuation and provisioning, and achieve a single set of high-quality global accounting standards. In relation to financial regulatory commitments, an annex to the leaders' statement provides greater detail in eight major areas: (i) FSB, (ii) international cooperation (focusing on financial institution failures), (iii) prudential regulation, (iv) scope of regulation, (v) compensation, (vi) tax havens and non-cooperative jurisdictions, (vii) accounting standards, and (viii) credit rating agencies.

Despite the range of coverage, it remains open to debate whether the G20 response to date, if implemented prior to the global financial crisis, would have in fact been sufficient to prevent its occurrence—arguably the central policy objective at this point in time.

2.2 Regional Responses

Given that it was not at the epicenter of the crisis, the region's response to the global financial crisis has been more limited than in the US and Europe. First, the Asian Development Bank (ADB) received support for a capital increase from its shareholders, intended to finance additional resources to weakened economies in developing member economies (DMCs).[9] Second, ADB has extended additional financing and developed a range of new facilities.[10] Third, in February 2009 ASEAN+3[11] committed itself to the Chiang Mai Initiative Multilateralization (CMIM), although work is ongoing in relation to administrative and implementation arrangements. As an interim arrangement, this function is being undertaken by ADB in coordination with the ASEAN Secretariat.

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9 ADB, General Capital Increase V, online: <http://www.adb.org/GCI/default.asp>.

10 First, ADB's crisis-related lending increased by more than US$10 billion in 2009-2010, bringing total ADB assistance for these two years to about US$32 billion. (The increase in lending comprises US$1 billion for trade finance, US$3 billion for the Countercyclical Support Facility and about US$6 billion to extend loans such as those for infrastructure investment.) Second, ADB support is being extended to both public and private sectors, with higher levels of concessional and non-concessional lending volume and guarantees for 2009-2010. Third, ADB is expanding support for infrastructure development. To this end, ADB is expanding the Asian Infrastructure initiative and is working proactively to arrange additional cofinancing for developing member country infrastructure development. Fourth, ADB is taking steps to rebuild business confidence, provide incentives for private sector investment, and facilitate trade financing. These private sector initiatives aim to deliver short-term finance and capital to vulnerable banking systems, either directly through ADB private sector operations or indirectly via government programs supporting bank recapitalization. Fifth, ADB is developing a bank liquidity guarantee program to provide partial credit guarantee cover for short-term borrowings by systemically important banking institutions. Finally, ADB provides policy analysis and knowledge support. To optimize impact, ADB is working closely with its development partners in the region, as well as with the IMF, the World Bank and regional organizations such as ASEAN, SAARC and APEC.

11 ASEAN+3 comprises the 10 members of the Association of Southeast Asian Nations plus the People's Republic of China, Japan, and the Republic of Korea.

2.3 Lessons of the Crisis

The global financial crisis has underlined the fact that preventing and addressing systemic risk (i.e., supporting financial stability) is the fundamental aspect of financial regulatory design. Systemic risk is defined as

> the risk that an event will trigger a loss of economic value or confidence in, and attendant increases in uncertainty about, a substantial portion of the financial system that is serious enough to quite probably have significant adverse effects on the economy. Systemic risk events can be sudden and unexpected, or the likelihood of their occurrence can build up through time in the absence of appropriate policy responses. The adverse real economic effects from systemic problems are generally seen as arising from disruptions to the payment system, to credit flows, and from the destruction of asset values.[12]

In the global financial crisis, it was the bankruptcy of Lehman Brothers on 15 September 2008 which finally triggered a global systemic financial crisis, causing "a loss of economic value or confidence in, and attendant increases in uncertainty about, a substantial portion of the financial system serious enough to have significant adverse effects on the economy."[13] In the first half of 2010, there was a clear risk of another major financial crisis, this time emanating from the euro area of the EU. Clearly, existing international arrangements prior to the crisis, and specifically in the US and the EU, were insufficient to preserve financial stability.

Designing a regulatory system to address systemic risks requires the following elements to be addressed: (i) a robust financial infrastructure (especially payment and settlement systems); (ii) well-managed financial institutions with effective corporate governance and risk management systems; (iii) disclosure requirements sufficient to support market discipline; (iv) regulatory systems designed to reinforce management and market discipline, as well as limiting and monitoring potential risks across all financial institutions; (v) a liquidity provider of last resort to provide liquidity to financial institutions and markets on an appropriate basis; (vi) mechanisms for resolving problem institutions; and (vii) mechanisms to protect financial services consumers in the event of financial institution failure.[14]

In each of these areas, there were clear weaknesses which combined to contribute to the global financial crisis. In hindsight, it is now clear that (i) too much attention was placed on monetary policy rather than balancing monetary policy and financial stability, (ii) regulatory attention focussed excessively on the safety and soundness of individual financial institutions rather than on systemic risks and linkages across institutions and markets, (iii) prudential regulatory and risk management systems did not take adequate account of market cycles and crises, and (iv) the realities of potential failures of large complex financial institutions had not been adequately addressed in advance. While the major regulatory failures at the heart of the crisis did not have their epicenter in Asia, there are nonetheless clear lessons for enhancing financial regulation in the region.

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[12] G10 (2001), p. 126-127.

[13] Ibid., p. 127.

[14] See Arner (2007). For an alternate view of systemic risk, see Schwarcz (2008).

Asia's developing, emerging, and developed economies must all take steps to address the lessons from the global financial crisis. In this context, developing economies should focus on issues relating to financial sector development (discussed in greater detail in section 7), and in particular on building effective and stable financial sectors. For Asia's emerging and developed economies (especially G20 members), attention should focus on financial stability arrangements, albeit not to the excessive detriment of financial sector development. In these respects, attention should focus on the four pillars identified by the G20: (i) a strong regulatory framework and robust financial market infrastructure (section 3); (ii) effective macroprudential and microprudential supervision (section 4); (iii) financial institution resolution and addressing systemic institutions (section 5); and (iv) transparent international and regional assessment, and peer review (section 6). In addition, the crisis provides an important opportunity to strengthen both the international and regional financial architecture (section 8).

3. Pillar I: Enhancing Financial Regulation and Financial Infrastructure

In relation to the first pillar—financial regulation and financial infrastructure—the G20 is addressing a range of specific issues, including: (i) capital, leverage, liquidity, and procyclicality; (ii) OTC derivatives markets; (iii) accounting standards; (iv) compensation arrangements; and (v) expanding the regulatory perimeter to address hedge funds, credit ratings and credit rating agencies, and securitization.[15] While the focus of concern in much of Asia differs from that of Europe and the US, each of these areas requires attention in the region.

3.1 Capital, Leverage, Liquidity, and Procyclicality

Weaknesses in capital, leverage, and liquidity of individual financial institutions were central to both the 2007–10 global financial crisis and the 1997/98 Asian financial crisis. In addition, existing capital standards played a role in both incentivizing excesses in lending during periods of high growth while restricting lending during recessionary periods. In other words, capital standards operated in a procyclical manner.

In this respect, the G20 has placed major attention on capital, liquidity, and leverage regulation as well as in reducing their potential procyclical effects. In this context, however, G20 members face conflicting objectives. Specifically, stronger capital requirements are necessary to prevent future crises, but at the same time, higher capital requirements restrict lending, thereby limiting the financial sector's capacity to support growth in the context of economic weakness. This is further complicated by the different economic situations across the G20, with the US, Europe, and Japan experiencing weak growth, while emerging markets, especially in Asia, are more concerned with possible overheating and asset price inflation.

In 2008 and 2009, the G20 committed to introducing enhanced systems for capital, liquidity, and leverage regulation, with the BCBS and FSB given the task of development. In addition, the G20 also committed to the implementation of the Basel II capital

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[15] See G20 (2010); FSB (2010d, 2010b).

adequacy framework, agreed upon in 2004, although in a revised form reflecting experiences and lessons of the global financial crisis. This revised framework is being increasingly referred to as Basel III.

Beyond capital, the FSB, BCBS, Committee on the Global Financial System (CGFS), and International Accounting Standards Board (IASB) are tasked to implement recommendations to address procyclicality. Further, in addition to capital and aspects of procyclicality, for the first time the G20 committed to a simple, transparent, non-risk based measure which is internationally comparable, properly takes into account off-balance sheet exposures, and can help contain the build-up of leverage in the banking system. The new measure is essentially a leverage ratio to restrict overall leverage across the financial system. The BCBS was also tasked to develop a framework to improve incentives for risk management of securitization, including due diligence and quantitative retention requirements. Finally, in addition to capital and leverage standards, the G20 committed to a new liquidity standard, with the BCBS tasked to develop a global framework for promoting stronger liquidity buffers at financial institutions, including cross-border institutions.

Although Asia's financial institutions have been relatively less effected than US and European financial institutions in terms of capital, liquidity, and leverage, they will clearly need to work to address international standards as they are developed. Moreover, given that ASEAN+3 is emerging from the crisis before the US and Europe, approaches within the region's leading economies are likely to be increasingly influential internationally, especially in the context of anti-cyclical prudential approaches such as property lending limits. As financial institution capital requirements now focus increasingly on equity, it will be important for Asian jurisdictions to consider whether domestic and regional equity markets are able to provide sufficient sources of funding to support equity capital requirements.

Internationally, the BCBS has moved quickly to address related issues. First, in April 2009 it made a series of recommendations for addressing procyclicality.[16] Second, in July 2009 the Committee announced measures to strengthen the market risk framework[17] and enhance Basel II.[18] Initial changes included introducing higher-risk weightings for securitization (pillar 1), issues relating to supervisory review of risk management (pillar 2), and disclosure requirements (pillar 3). Third, the Committee released for consultation, as part of its comprehensive approach announced in September 2009, a proposal to address (i) improving the quality and harmonization of capital, focusing on the role of Tier 1 equity; (ii) strengthening counterparty capital requirements relating to derivatives, repos, and securities financing, with an intention to incentivize movement to central counterparties and exchanges; (iii) introducing a leverage ratio; (iv) measures to promote a countercyclical capital framework, including provisioning; and (v) introducing a minimum liquidity standard.[19] Fourth, the Committee

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[16] FSF (2009f).

[17] BCBS (2009f, 2009e).

[18] BCBS (2009d).

[19] BCBS (2009b, 2009c).

is currently working on proposals relating to macroprudential supervision (discussed in section 4 below).[20]

In June 2010, the G20 reiterated its support for development of "a new global regime for bank capital and liquidity."[21] Under the agreement, "the amount of capital will be significantly higher" and "the quality of capital will be significantly improved" to "enable banks to withstand—without extraordinary government support—stresses of a magnitude associated with the recent financial crisis." Specifically, the G20 agreed that the new capital framework would:[22]

(i) establish a new requirement that each bank hold in Tier 1 capital, at a minimum, an increasing share of common equity, after deductions, measured as a percentage of risk-weighted assets sufficient to withstand with going concern fully-loss absorbing capital stresses equivalent to those of the global financial crisis; and

(ii) move to a globally consistent and transparent set of conservative deductions generally applied at the level of common equity or its equivalent in the case of non-joint stock companies over a suitable globally consistent transition period.

In September 2010, the BCBS agreed the underlying elements of the new Basel III capital adequacy regime.[23] In relation to capital, rather than the Basel I–Basel II framework of 8% capital to risk-weighted assets, with at least half in Tier 1 equity and hybrid instruments supplemented by Tier 2 subordinated debt and a range of innovative instruments supporting market risk (Tier 3), The Committee adopted a structure focused on common equity capital. Under the agreement, total minimum capital remains at 8%. However, minimum common equity capital is 4.5%, with Tier 1 capital at 6%, leaving Tier 2 at most 2%. In addition, there will be a 2.5% conservation buffer, made up of common equity, for a minimum capital adequacy ratio of 10.5%. Finally, there will be the possibility for an additional countercyclical buffer of 0-2.5% of common equity or "other fully loss absorbing capital", the details of which are yet to be finalized.

Thus, it is now abundantly clear that financial institutions, as now required by markets, will in many cases need to have higher amounts of equity capital. In addition, the global crisis highlighted that subordinated debt, at least when held by other financial institutions, is unlikely to provide much in the way of external monitoring, thereby ameliorating its role in supporting corporate governance and financial stability. As a result, subordinated debt is has become significantly less important in terms of capital.

In addressing these issues, Asian economies have in many cases already begun to take action, despite the fact that the BCBS has agreed that final implementation will not be required until 2019. In looking to the region's needs, most important will be supporting supervisory capacity in related areas. In addition, given the increased importance of

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[20] FSB (2009b), p. 4.

[21] G20 (2010), p. 4.

[22] Ibid., p. 16.

[23] BCBS (2010d).

equity capital, regional equity market development can both assist and be assisted, with debt capital markets remaining a continuing area of necessary focus.

At the same time, the crisis has brought forward proposals relating to innovative capital instruments, such as contingent convertible securities ("cocos"), which automatically convert to equity when financial institutions' capital ratios drop to certain preset levels, as well as other hybrids pre-committing investors to provide additional capital as equity or debt at certain trigger points. As the types of qualifying instruments become clear, Asian jurisdictions will have to carefully evaluate the capabilities of their existing domestic and regional markets to support such capital provision. Finally, it appears likely that many of the previous techniques prevalent in the use of structured products and derivatives to arbitrage regulatory capital, especially in the US and Europe, will no longer be available. In this context, Asian regulators will need to have a clear understanding of the various forms of capital available in order to judge whether instruments proposed are in fact appropriate and in need of regulatory approval.

The other side of the equation is also being considered, relating to the various methodologies for calculating risk-weightings for assets. While Basel I was overly simplistic, Basel II was overly complex and too reliant on both external credit ratings and internal quantitative models. As a result, both were highly subject to gaming by market participants, with regulators in the US and UK adopting excessively permissive approaches to such behavior and instruments. In relation to assets, as a result of the crisis, issues relating to off-balance sheet treatment are being reconsidered and tightened to avoid a return of the shadow banking system and also to reduce complexity of institutions and products. One area receiving particularly close scrutiny is market risk, with the view that market risk should be much more closely regulated than has previously been the case. Such issues are tied closely not only with regulatory standards, but also with accounting treatment.

Beyond capital, Basel III appears likely to add both a leverage ratio as well as liquidity requirements. As of September 2010, the final details of both the leverage and liquidity requirements were still under discussion, although the BCBS has now agreed that minimum liquidity requirements for both coverage and funding will be introduced in 2015 and 2018 respectively.[24] In the region, most jurisdictions already use a range of liquidity requirements (typically associated with domestic government bond markets) and these approaches may require fine-tuning as a result of international developments. For less developed economies, there will be a clear need for continued focus, not only on enhancing regulation, but also on developing domestic and regional government bond markets to support appropriate liquidity management.

In relation to leverage, this is an important development in that a central failure of Basel II was its over-complexity and the resultant proclivity of financial institutions to seek to game the system. A simple leverage ratio has the important potential to not only limit a central aspect of the build-up of the crisis (through leverage and related asset price inflation), but also to limit the potential for gaming the capital framework.

Beyond bank capital, the work of the BCBS, and the emergence of Basel III, other financial standards setters (especially for securities and insurance) are now developing

[24] BCBS (2010d).

parallel capital frameworks to enhance financial stability and reduce regulatory arbitrage. Given that in most jurisdictions (including in Asia), regulation of non-bank financial institutions such as securities firms and insurance companies tends to be weaker than that of banks, there is a clear need for review mechanisms and related assistance, both domestically and regionally.

In looking forward, regional fora such as the Executives' Meeting of East Asia and Pacific Central Banks (EMEAP) and the emerging Asian Financial Stability Dialogue (AFSD) provide opportunities not only for Asia to influence standards being developed through the BCBS and others, but also to regionalize international standards as they develop, enhance financial stability in the region, and take into account the needs for developmental guidance in regulation across much of the region.

3.2 OTC Derivatives Markets

Prior to the global financial crisis, regulation of OTC derivatives markets was generally left to private ordering, most often led by the International Swaps and Derivatives Association (ISDA), with markets limited to only sophisticated participants and supervision being undertaken through monitoring of the major bank participants in the market. At the same time, OTC derivatives received significant legal and regulatory support through amendments to Basel I and their incorporation into Basel II, as well as legal changes to support netting in many jurisdictions. In the wake of the global financial crisis, the lack of transparency in these instruments and markets has been a particular area of concern, especially given their central role in the context of the near collapse of AIG in 2008 and the 2010 Greek debt crisis.

As a result, the G20 has identified strengthening the resilience and transparency of credit derivatives markets, and reducing their systemic risks, including by improving the infrastructure of the OTC markets, as an area of priority concern. In this context, G20 leaders have focused on five elements: (i) launching CDS central counterparty systems, (ii) reducing systemic risks in CDS and OTC derivatives transactions, (iii) developing exchange-traded or electronic trading platforms for CDS, (iv) expanding OTC derivatives market transparency, and (v) improving the robustness of OTC derivatives infrastructure.

In relation to OTC markets, in September 2009 an OTC Derivatives Regulators' Forum was established. However, at inception, it only included representatives from Australia[25] and Japan[26] from the Asia–Pacific region. In addition, the International Organization of Securities Commissions (IOSCO) and the Committee on Payment and Settlement Systems (CPSS) are currently reviewing existing standards for central counterparties and developing standards for OTC derivatives trade repositories, with draft guidance released in May 2010.[27]

In June 2010, the G20 pledged to accelerate the implementation of OTC derivatives regulation, reaffirming commitments to trade all standardized OTC derivatives on

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[25] Australian Prudential Regulatory Authority, Australian Securities and Investment Commission, and Reserve Bank of Australia.

[26] Bank of Japan, Japan Financial Services Agency.

[27] CPSS–IOSCO (2010a, 2010b).

exchanges or electronic clearing platforms and clear through central counterparty clearinghouses (CCPs) by end-2012 at the latest, with reporting to trade repositories.

In looking forward, there are five main approaches being proposed: (i) prohibition, (ii) transparency, (iii) clearing–settlement, (iv) exchange migration, and (5) private ordering. Prior to the Greek debt crisis, prohibition did not appear to have significant support. However, there now appears to be increasing support for proposals relating to the prohibition of naked sovereign CDS, in order to reduce speculation. Historically, however, prohibitions of financial products have generally not been successful. In addition, in the context of global financial markets, any such approach without universal agreement is likely to provide significant opportunities for regulatory arbitrage. As a result, it seems unlikely that this approach will be widely adopted. At the same time, while ISDA and other market participants continue to lobby strongly for OTC derivatives markets remaining largely unregulated in privately ordered markets, the status quo seems unlikely to remain, despite ISDA's efforts to enhance its role and restructure its organization to parallel the changes made to the IASB post-Enron. As a result, efforts to enhance transparency, improve clearing and settlement arrangements, and support migration of products to exchange-traded environments appear to be the most likely result going forward.

To date, the US and Europe have taken a leading role in addressing issues relating to regulation, clearing, and settlement. Despite their faults, derivatives markets play an important role in risk management and market efficiency. Given the benefits of such markets and instruments, this is an area where Asia needs to take further steps, at both the domestic and regional levels. While OTC derivatives markets are currently less developed in Asia than in Europe or North America, this provides an opportunity for the region—whether at the domestic or regional levels—to migrate markets to structures based on transparent trading and clearing arrangements informed by emerging global best practices.

3.3 Accounting Standards

The lack of transparency of institutions, products, and markets was central to the process of adverse selection and loss of confidence as the "Great Moderation" of the beginning of the decade transformed into a global financial crisis. Likewise, issues relating to transparency made regulation of firms, markets, and products difficult, and complicated responses as the crisis developed.

In relation to accounting, the G20 has repeatedly stated its commitment to the development of a single set of international accounting standards. At the same time, it appears increasingly likely that for the foreseeable future, there will remain two main systems of accounting: IASB International Financial Reporting Standards (IFRS) and US Generally Accepted Accounting Principles (GAAP). At present, major issues have arisen in the context of what is the appropriate focus of accounting: the fair value approach based on market values or the historical basis approach focused on longer horizons. While accounting standard-setters are moving closer on these issues, they are likely to remain contentious for some time. In addition, there are a range of issues relating to the relationship between accounting and regulatory treatment, for instance in relation to capital, off-balance sheet treatment, and provisioning. In this context, one objective of Basel II was to bring economic, accounting, and regulatory capital together. At present,

standards and approaches to economic, accounting, and regulatory capital may once again be diverging, even though convergence of the three forms of capital remains a goal.

In June 2010, the G20 reiterated its support for convergence and development of a single set of high quality global accounting standards, as well as for the IASB to expand its outreach to emerging economies.[28]

Most economies in Asia have or are in the process of bringing their domestic systems of accounting into line with IFRS. As highlighted in Table 1, it has become policy in some of the region's economies to follow international accounting standards established by the IASB and to adjust individual economies' accounting rules to be in line with IFRS. At present, no Asian jurisdiction has replaced national accounting standards with IFRS. The picture is somewhat weaker in relation to international standards on auditing (ISA), but still quite positive.

Table 1: IFRS Adoption in Developed and Emerging East Asia

	IFRS not permitted for domestic listed companies	IFRS required for all domestic listed companies
Australia		X
China, People's Rep. of Hong Kong, China	X	X
India		2011
Indonesia	X	
Japan	X	
Korea, Rep. of		2011 (permitted in 2009)
Malaysia		X
Philippines		X
Singapore		X
Taipei,China	X	
Thailand	X	

IFRS = International Financial Reporting Standards.
Source: www.iasb.org, www.iosco.org, and authors' research.

In this context, there is clearly a need for continued building of accounting infrastructure across the region in line with international standards, especially in the context of human capital development in the accounting and auditing professions. This is also an area where regional convergence should be attainable. Asian jurisdictions are already converging domestic standards to international standards. As has been done in the EU, ASEAN+3 and other regional fora can make an explicit commitment for this to continue. Such a commitment would enhance transparency across the region as well as support domestic and regional financial development.

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[28] G20 (2010), p. 20.

3.4 Compensation Arrangements

Improperly assigned incentives played an important role in the build-up of excesses leading up to the global financial crisis. In this context, particular attention should be focused on compensation practices in the financial sector which led to a short-term bias as well as excessive risk taking in the industry.

The G20 April 2009 communiqué contained a strong commitment on compensation, which has been supported by the release of related principles from the FSB. According to the G20 and the FSB, the principles require: (i) firms' boards of directors to play an active role in the design, operation, and evaluation of compensation schemes; (ii) compensation arrangements, including bonuses, to properly reflect risk and the timing and composition of payments to be sensitive to the time horizon of risks, with payments not finalized over short periods where risks are realized over long periods; and (iii) firms to publicly disclose clear, comprehensive, and timely information about compensation to stakeholders, including shareholders. Significantly, the G20 committed to having national supervisors implement the principles in order to be effective for 2009 compensation arrangements, with the BCBS integrating the principles into guidance, and supervisors assessing firm compensation and intervening as necessary.

Internationally, the FSB released principles for compensation in April 2009 [29] and implementation standards in September 2009.[30] In March 2010, the FSB released its peer review of compensation.[31] In Asia, G20 members have implemented the principles or released proposals to do so. Nonetheless, this will be a potentially more difficult issue in some Asian financial centers, which have been relatively less affected by the crisis but which stand to gain from allowing more competitive compensation structures. At the same time, within Asia, there are likely to be conflicts between financial centers, such as Singapore and Hong Kong, China, and jurisdictions focusing more on balanced development, such as the PRC and Japan.

3.5 Expanding the Regulatory Perimeter: Regulation of Non-traditional Financial Firms

In the context of both the 2007–10 global financial crisis and the 1997/98 Asian financial crisis, issues relating to expansion of the regulatory perimeter[32] have received significant attention, including hedge funds and credit ratings and credit rating agencies. In addition, in the wake of the global financial crisis, a third issue is now being discussed: securitization. An additional area of significant relevance in Asia relates to sovereign wealth funds.

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[29] FSF (2009d).

[30] FSB (2009a).

[31] FSB (2010c).

[32] See FSB (2010b)

3.5.1 Hedge Funds

While hedge funds were often viewed as major causes of the 1997/98 Asian financial crisis, during the recent global financial crisis, they have not received a central portion of the blame. At the same time, due to the lack of transparency in the industry, they have remained a continuing issue for attention, especially in continental Europe.

At the international level, the G20 has agreed that hedge funds should be subject to appropriate regulation, especially in the context of systemically important hedge funds given the experience with Long-term Capital Management (LTCM) in 1998, but also focusing generally on enhancing the transparency of the industry. To date, IOSCO has established six high level principles for regulation,[33] guidance addressing funds of hedge funds,[34] and a template for the global collection of hedge fund information to support transparency and supervision.[35] Significantly, IOSCO released a revised version of its key principles document, Objectives and Principles of Securities Regulation, including a new principle requiring hedge funds and hedge fund managers/advisors to be subject to appropriate oversight.[36]

In the context of Asia, conflicts may arise between continuing post-Asian financial crisis anti-speculative regulatory tendencies and potential competitive advantages in attracting an increasing percentage of the hedge fund industry to Asia's growing economy and financial system. Given this potential conflict, Asian financial centers should pay careful attention to international norms in balancing their needs for stability and transparency against competitiveness and opportunities for regulatory arbitrage.

3.5.2 Sovereign Wealth Funds

Prior to the global financial crisis, sovereign wealth funds (SWFs), especially from major emerging and developing economies in Asia and the Middle East, began receiving significant attention from developed Western economies concerned with their rising financial power and close state connections.[37] During the early stages of the global financial crisis, US and European financial institutions and officials looked to SWFs as possible solutions, in the form of necessary capital investments to shore up weakening banks and investment banks. In the wake of the global financial crisis, international approaches to SWFs appear to be taking on a more balanced and nuanced nature, with recognition of their potential value as well as their potential limitations, including concerns relating to sovereignty and international economic competition and influence.

As the result of an IMF initiative, the International Working Group of Sovereign Wealth Funds (IWG) was established in 2008. In October 2008, the IWG released the Santiago Principles for SWFs.[38] In April 2009, IWG members agreed to establish the International

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[33] IOSCO (2009e).

[34] IOSCO (2009d).

[35] See FSB (2010b), p. 13.

[36] IOSCO (2010).

[37] Asia Bond Monitor April 2008. Asian Development Bank.

[38] IWG (2008).

Forum of Sovereign Wealth Funds, which includes five Asia–Pacific members.[39] In relation to SWFs and given the significance of such funds in the region, development of regional approaches could potentially be very valuable. This is especially important in relation to supporting the redirection of SWF investments into the region's economies and financial systems. At the same time, however, SWFs raise real concerns regarding the use of state resources, which remain complex within the region.

3.5.3 Credit Ratings and Credit Rating Agencies

Prior to the global financial crisis, credit rating agencies (CRAs) had been periodically subject to criticism—in the context of most corporate and financial crises—and as a result some attention had been given to their role and regulation, such as IOSCO's 2003 Principles for the Activities of Credit Rating Agencies[40] and Code of Conduct.[41] However, since the global financial crisis credit ratings and CRAs have become a central focus.

As an initial step in 2008, IOSCO revised the Code of Conduct in response to the initial stages of the crisis,[42] including adding certain provisions regarding structured finance. The FSF also met and released a report on Enhancing Market and Institutional Resilience which, in many ways, would come to be overshadowed by subsequent events. In this report, the FSF focused on regulatory reforms in five main areas, including the role and uses of credit ratings, and a mandate to review the use of credit ratings and regulation of CRAs through IOSCO, the Joint Forum and domestic regulators.[43] This report focused on two main aspects: (i) regulation of CRAs, and (ii) reducing regulatory and market reliance on credit ratings themselves. In a follow-up report during the systemic phase of the crisis, the FSF reviewed progress and recommitted to the content of its April 2008 report, including CRAs and credit ratings, especially in regard to establishing a globally consistent approach to CRA regulation.[44] Both of these FSF reports were subsequently largely subsumed in the November 2008, April 2009, and September 2009 G20 statements, all of which express commitment to the regulation of CRAs.

More recently, IOSCO has conducted a review of the implementation of the Code of Conduct[45] and released guidance relating to international cooperation in CRA oversight.[46] Most significantly, and related to the 2008 FSF report, the Joint Forum has reviewed the use of credit ratings.[47] Most significantly, in June 2010, the G20 committed

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39 Australia (The Future Fund), Korea (Korea Investment Corporation), New Zealand (New Zealand Superannuation Fund), PRC (China Investment Corporation), and Singapore (Temasek Holdings, Government of Singapore Investment Corporation).

40 IOSCO (2003).

41 IOSCO (2004).

42 IOSCO (2008).

43 FSF (2008a).

44 FSF (2008b).

45 IOSCO (2009g).

46 IOSCO (2009a).

47 Joint Forum (2009b).

"to reduce reliance on external ratings in rules and regulations,"[48] which was an important step in enhancing market functioning going forward.

Asia has been working to develop domestic and regional institutions. The Association of Credit Ratings in Asia (ACRAA)[49] was organized in 2001 at ADB by 15 Asian CRAs from 13 economies. ACRAA currently includes 25 rating agencies from 14 economies in Asia.[50]

ACRAA has created a Best Practices Committee and Training Committee, established a Code of Ethics and a Best Practices Checklist, and hosted a range of workshops. Significantly, however, the lower level of ratings use for regulatory purposes, which is partially the result of less developed markets for ratings in the region, has meant that ratings and CRAs are less of a concern in the region than elsewhere. The global financial crisis highlighted the dangers inherent in relying on CRAs to the detriment of investor and regulatory due diligence. In this context, the region has a real opportunity to avoid excessively imbedding credit ratings in regulation—especially capital, liquidity, and asset management regulation—all of which contributed to the excessive reliance placed upon credit ratings and CRAs in global markets prior to the global financial crisis. Asian jurisdictions should carefully consider the roles played by credit ratings and CRAs in the region's financial systems, with a bias towards encouraging investor responsibility and away from excessive reliance on credit ratings in debt capital markets and regulation.

3.5.4 Securitization

Clearly, techniques of securitization were abused prior to the global financial crisis. Instruments, markets, and methodologies—especially their over-complexity, financialization, and lack of transparency—were at the heart of the crisis. At the same time, securitization provides a range of potential benefits in relation to financing and risk-sharing. The result is that securitization should not be prohibited, but that significant changes to regulatory treatment are necessary to support effectively functioning markets.

To date, securitization markets have not yet recovered internationally. While a range of reports and standards have been released,[51] significant questions regarding the future of securitization remain. At the same time, prior to the global financial crisis, securitization markets in Asia were less developed than those in Europe or North America. The result has been that finance and financial institutions in Asia are less dependent on securitization than their developed world counterparts. In looking forward, regional

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[48] G20 (2010), p. 19.

[49] ACRAA's objectives are to (i) develop and maintain cooperative efforts that promote interaction and the exchange of ideas, experiences, information, knowledge, and skills among CRAs in Asia, and enhance their capabilities and role in providing reliable market information; (ii) undertake activities aimed at promoting the adoption of best practices and common standards that ensure high quality and comparability of credit ratings throughout the region, following the highest norms of ethics and professional conduct; and (iii) undertake activities aimed at promoting the development of Asia's bond markets and cross-border investment throughout the region.

[50] Bahrain, Bangladesh; China, People's Republic of; India; Indonesia; Japan; Korea, Republic of; Malaysia; Pakistan; Philippines; Sri Lanka; Taipei,China; Thailand; and Uzbekistan.

[51] Joint Forum (2009a); IOSCO (2009b, 2009c, 2009d, 2009e, 2009f).

approaches focusing on transparency and disclosure, centralized trading and investor due diligence have the potential to support market development, financial stability, and economic growth.

4. Pillar II: Supporting Effective Macroprudential and Microprudential Supervision

At the heart of the global financial crisis were two serious supervisory failures, both relating to the scope and coverage of regulation, domestically, regionally, and internationally. As a result, the G20 in June 2010 identified supervision as the second pillar of their financial reform agenda.[52]

First, in a number of jurisdictions, especially the US, regulatory gaps, overlaps, and divisions presented opportunities for regulatory avoidance and arbitrage. Combined with a general philosophy of regulatory permissiveness, this allowed financial institutions to organize their operations to minimize and in many cases avoid regulatory scrutiny. At the same time, global markets and financial institutions maximized regulatory arbitrage opportunities within individual economies and across jurisdictions, with the result being that no single regulator had a clear picture of all of the activities and risks of any given global financial institution or market despite the attention placed on consolidated supervision during the 2 decades prior to the global financial crisis. Moreover, in reality, financial institution management in most cases did not have a clear understanding of the scope of their own operations, risks, and legal structure. These elements have been brought to light most clearly in the context of the near failure of AIG and the insolvency of Lehman Brothers. Likewise, significant financial markets were organized to minimize regulatory scrutiny and interference, resulting in a lack of transparency for complex global financial institutions and for many of the markets and products in which they dealt. The clearest examples were the markets for credit risk transfer such as securitization and CDS, with the most extreme example being the pre-crisis shadow banking system of conduits, SIVs, and complex structured products.

Second, financial authorities—finance ministries, central banks, and regulatory agencies—focused excessively on the safety and soundness of individual financial institutions, or microprudential supervision. As noted in the previous paragraph, in many cases authorities failed even in this responsibility while in addition failing to consider linkages across institutions, markets, and products, or macroprudential supervision. Macroprudential supervision was largely neglected, despite increasing numbers of central banks being given or taking on specific objectives relating to overall financial stability in the 10 years preceding the global crisis.

4.1 International Responses

Following the November 2008 G20 Declaration that all systemically important financial institutions, markets, and instruments would be subject to appropriate regulation, in April 2009, the G20 Financial System Declaration provided a much greater level of detail. Specifically, the April Declaration included eight aspects. First, regulatory systems

[52] G20 (2010), p. 4.

should be reformed to ensure authorities are able to identify and take account of macroprudential risks across the financial system including in the case of regulated banks, shadow banks, and private pools of capital to limit the build-up of systemic risk, with the FSB, BIS, and international standard-setters tasked to develop specific macroprudential tools. Second, the G20 agreed that large and complex financial institutions require particularly careful oversight given their systemic importance. While seemingly self-evident, this reflects an important shift in emphasis from the pre-crisis period, in which such firms were viewed as better able to address the risks they faced than regulators, to the post-crisis period, in which the internal risk management systems of large financial institutions will be particularly closely monitored by regulators. In support of this, G20 national regulators must have the powers necessary to gather relevant information on all material financial institutions, markets, and instruments in order to assess the potential for either their failure or severe stress to contribute to systemic risk. In addition, in order to prevent regulatory arbitrage, the IMF and the FSB are developing guidelines for national authorities to assess whether a financial institution, market, or instrument is systemically important.

Beyond traditionally systemically significant firms, hedge funds or their managers are to be registered and required to disclose appropriate information on an ongoing basis to supervisors or regulators—including leverage—necessary for assessment of the systemic risks that they pose individually or collectively. At the same time, supervisors will require institutions which have hedge funds as their counterparties to have effective risk management, including mechanisms to monitor the funds' leverage and set limits for single counterparty exposures. In relation to credit derivatives, standardization and resilience of credit derivatives markets, in particular through the establishment of central counterparties and clearing arrangements subject to effective regulation and supervision, will be promoted through working in conjunction with industry participants in developing an action plan on standardization, with ISDA having taken a particularly active role thus far. Finally, in relation to keeping pace with future innovation, G20 members will each review and adapt the boundaries of their regulatory frameworks regularly to keep pace with developments in the financial system and promote good practices and consistent approaches at the international level.

In addressing prevention, the global financial crisis has shown that the overall design and coverage of a regulatory system are vital to its effectiveness. In Asia and internationally, as highlighted by the G20, there is an urgent need to review and enhance the scope of regulation, focusing on regulatory design to eliminate gaps and implement effective macroprudential financial system oversight. This requires a reshaping of regulatory systems so that authorities are able to identify and take account of macroprudential risks, with the scope of regulation and oversight extending to systemically important financial institutions, instruments and markets, including non-bank financial institutions, and to CRAs to ensure they meet the international code of good practice, particularly to prevent unacceptable conflicts of interest. In addition, prudential standards must be designed to address 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.

In June 2010, the G20 tasked the FSB in consultation with the IMF to report on recommendations to strengthen both macroprudential and microprudential oversight and

supervision, specifically relating to the mandate, capacity, and resourcing of supervisors and specific powers to proactively identify and address risks.[53]

For Asia, two central lessons can be drawn. The first is the necessity of putting in place appropriate macroprudential arrangements, domestically and regionally. The second is the necessity of reviewing the design of domestic and regional regulatory structures to address gaps and reduce the potential for regulatory arbitrage.

4.2 Macroprudential Supervision

In the wake of the global financial crisis, there has been widespread recognition of the need to (i) strengthen links among the key components of a financial system, (ii) examine carefully how systemic risk varies over time, and (iii) study the robustness of that system when hit by shocks or systemic risk. Excessive risk-taking, combined with a lack of prudential supervision and loose monetary policy, are generally viewed as important contributors to the global financial crisis (as well as the 1997/98 Asian financial crisis). While financial institutions survive and prosper by taking risks, the risks they take must be well-managed. Central banks and regulators have a fundamental role in ensuring financial stability by monitoring the performance of banks and other financial institutions, but their collective actions were clearly not sufficient to prevent the crisis.

The global financial crisis has also accentuated the importance of systematically introducing a macroprudential approach for assessing soundness in financial systems as well as in individual financial institutions. Regulators need to identify banks and other financial institutions that do not manage their risks well. Such monitoring should not only be concerned with the stability of individual institutions, but should also include a macroprudential orientation that comprises monitoring, regulation, and supervision to examine how risk is distributed across a financial system at any given point in time, and identify and address how aggregate risk evolves over time. However, although the need for a macroprudential approach has heightened over the past 15 years, the macroprudential toolbox is still in the process of development and its concepts are as complex as they are poorly understood.[54] In addition, a macroprudential approach needs to be flexible to take into consideration the changing dynamics of the global financial system and regional financial markets.

A macroprudential approach can be viewed as being two-dimensional—cross-sectional and time-dimensional—with implications for monitoring financial system soundness, the calibration of prudential tools,[55] and ultimately, the regulation and supervision of financial institutions. It provides a framework to monitor, examine, and address risks to financial stability. One purpose for monitoring would be to aid in the early detection and timely recognition of financial vulnerabilities across financial instruments, financial markets, and financial institutions, thus alerting supervisory and regulatory authorities and the financial industry. Another would be to assess the likely consequences for financial stability and

[53] G20 (2010), p. 5 and 17.

[54] For a detailed discussion, see Schou-Zibell, Albert, and Song (2010).

[55] Existing prudential tools such as risk-weighted capital requirements, as exemplified by Basel II, are already supposed to ensure that high risks demand higher capital. The problem, however, was that regulators' measurements were error prone.

the risk of failure of individual institutions, which would be helpful for assisting financial market supervisors and regulators to formulate and implement remedial actions that allow businesses to adjust their strategies and limit significant real economic losses. Such a system-wide approach provides an analytical tool for linking macroeconomic development, risk-taking, and financial system stability.

Across economies, examinations have been undertaken of macroeconomic and financial soundness indicators (FSIs) that are useful for a macroprudential approach, especially for the purpose of regularly identifying coincidental and leading signals of financial vulnerability. Cross-country studies have also been carried out, but with difficulties owing to data issues (e.g., inherent differences in data sets, definitions of indicators, frequency and accuracy of data) and to the widely diverse stages of development of the financial systems being studied. FSIs are also mainly backward-looking indicators (as opposed to forward-looking). In addition, higher frequency data are generally more desirable to have for monitoring and evaluation of a financial system since higher frequency data can better foreshadow emerging vulnerabilities than the annual aggregate FSI data generally used to date.[56] Capturing systemic risk through indicators and through supervision and regulation thus requires an assessment of financial stability using a range of approaches and indicators. It also requires the integration of the various perspectives of market participants—supervisors, regulators, rating agencies, risk managers, economists, and many other stakeholders—to take a holistic view of the financial system.

Macroprudential monitoring examines trends in the economy and the financial system as a whole that can impact financial stability and trigger large-scale financial crises. With larger institutions, greater competition across market segments, and the growing importance of capital markets, interrelationships among individual institutions and their products and markets need to be examined in the context of the risks that the largest financial institutions (of whatever label) pose to the overall financial system. With microprudential stability being neither necessary nor sufficient for macroeconomic and financial stability, macroprudential supervision is concerned with encouraging financial institutions to behave in a different way in instances when taking a risk that may be considered prudent behavior for a single institution could be destabilizing if the same risk were taken by a number of institutions.

4.2.1 Developing a Macroprudential Approach to Supervision

The macroprudential approach to supervision should complement and reinforce monetary policy in sustaining economic growth. 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 by anchoring inflationary expectations, which reduces the risk of deflation and helps stabilize economic activity. Monetary policy has been particularly relevant in stabilizing financial sectors around the world in response to the global financial crisis. On the other hand, a sound financial system can contribute to price stability and macroeconomic stability by facilitating the transmission of monetary policy actions and cushioning the impact of macroeconomic shocks through the financial sector. In addition, a stable and sound financial system decreases the incidence of financial stress and crises, and leads to less disruption to economic activity,

[56] The International Monetary Fund (IMF) is developing through its Data Link Project a set of timely and higher-frequency indicators for, at least initially, systemically important countries.

which contributes to price stability. In the wake of the global financial crisis, many policymakers and commentators have suggested that central banks should pay more attention to the financial sector and financial excesses, and, where such is not already the case, take on financial stability as a statutory objective or guiding principle. Nonetheless, it is also true that those who have recognized this have by no means been immune to the crisis. At the very least, an explicit financial stability objective for central banks as well as regulatory agencies would highlight stability as an area of responsibility and provide a mechanism for accountability.

In addition, there may be trade-offs between price and financial stability in certain circumstances, as shown by the global financial crisis. High growth and low inflation and interest rates in the 2 decades preceding the crisis, which has come to be known as the Great Moderation, created an environment that encouraged increased risk-taking and leverage, and subsequently supported the development of the asset bubbles that underlay the crisis. In this environment, policymakers must balance between future financial stability and present price stability. The first half of 2008 also created another dilemma for central banks in many economies as inflation around the world rose due to high oil and commodity prices, while at the same time financial stability was in jeopardy as major economies were experiencing a credit crunch due to the bursting of the housing bubble in the US. In this environment, maintaining price stability would have aggravated financial instability.[57]

According to Tinbergen's principle[58] relating the number of instruments to the number of policy objectives, monetary policy tools may not be useful in targeting financial stability. Policymakers need additional tools other than the interest rate, particularly when there are trade-offs between policy objectives. Interest rate policy may be too powerful and blunt to address financial stability. Factors affecting financial stability, such as asset price bubbles, may require a major change in the interest rate, which would cause material damage to other parts of the economy. Macroprudential policy tools—such as capital requirements, additional capital buffers for banks, guidance regarding leverage ratios, liquidity management of financial institutions, and limits on lending (especially loan-to-value ratios)—may be more appropriate. However, applying additional capital requirements for macroeconomic reasons that are not directly related to individual financial institutions is not a straightforward process and would have feedback effects on interest rates and thus monetary policy. While there is a growing consensus that monetary policy may also have a role to play in maintaining financial stability by leaning against asset bubbles,[59] the rapid expansion of central bank balance sheets—resulting from their intervention on behalf of systemically important institutions that were under particular liquidity stress—risks compromising price stability.

The rapid build-up of central bank balance sheets in response to the global financial crisis came about as a result of both standard and innovative tools used to supply liquidity. Central banks acting in their traditional role as lender of last resort had to adapt

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[57] Many central banks also ignored inflation when it was high but did not ignore it when it was low for structural reasons and when tight monetary policy may have been the better option.

[58] Tinbergen's principle is concerned with the existence and location of a solution to the system. It does not assert that any given set of policy responses will, in fact, lead to that solution. To assert this, it is necessary to investigate the stability properties of a dynamic system.

[59] White (2009), Davies (2009), Yellen (2009).

radically in order to (i) lend at longer maturities; (ii) accept a broader range of non-traditional collateral; and (iii) lend to non-traditional counterparties, especially investment banks. In addition, price stability can be compromised by expanded balance sheets as (i) large excess reserves can result in rapid credit growth and inflationary pressure, (ii) certain assets can be hard to use for monetary policy and liquidity management, (iii) a reliance on quantitative tools might make it difficult to judge the stance of monetary policy, and (iv) losses and quasi-fiscal operations can lead to political pressures that undermine central bank independence.[60]

4.2.2 Coordination and Communication

In addition to the technical difficulties of identifying vulnerabilities lies the challenge for any early warning system (EWS), scenario analysis, or stress test: persuading policymakers to act upon vulnerabilities once they have been identified. For this, a deep understanding of the nature of financial vulnerabilities and ultimately of systemic risk is needed. Financial safety net players and fiscal authorities thus need to engage policymakers in clear and well-calibrated communication that is established by comprehensive evidence that has been carefully weighed and analyzed. Such analysis would include not only a description of the underlying sources of financial vulnerability, but also the shocks that may cause the vulnerability to unwind and how these shocks can be transmitted across institutions, sectors, markets, and economies. Early warnings would also need to be accompanied by a clear set of policy options that emphasize the trade-offs between addressing different types of risks and underscore the need for national, regional, and international policy coordination.[61] Fragility in the financial sector can also have spillover effects on consumer and investor confidence, capital flows, public finances, and financial intermediation.

While close coordination and cooperation among financial safety net players, fiscal authorities, and policy makers is necessary, conflicting mandates could undermine the effectiveness of handling financial vulnerabilities, especially when the need to handle financial institution failures arises. Although the precise mechanisms of coordination will depend on each respective economy's institutional structure, there should be a clearly articulated division of powers and responsibilities agreed upon by the participants to prevent, as much as possible, unproductive overlapping and duplication of activities.

The need for coordination and cooperation does not stop at the national level. The global financial crisis proved once again that coordination and cooperation are mandatory at the national, regional, and global levels when responding to systemic problems. Reform proposals and detailed action plans have emerged in various global fora. However, there are huge gaps between declarations of reform policies and their actual implementation. Additional cooperation is required to ensure regional and global financial stability. To strengthen financial systems with appropriate macroprudential oversight and extend supervision over a wider set of market segments and institutions, especially those deemed systemically important, policymakers from around the region and the world will need to work together. It is also important that Asia actively participates in the reform process to ensure that the new financial architecture matches the needs of globalized finance with the region's financial development agenda.

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[60] Cottarelli and Vinals (2009).

[61] Ghosh, Ostry, and Tamirisa (2009).

In addition to systematically introducing a macroprudential approach to the supervisory framework, ASEAN+3 encourages greater cooperation in monitoring and surveillance. One positive example of regional cooperation is the expansion and multilateralization of the ASEAN+3 CMIM reserve pool. This initiative includes the establishment of an independent regional surveillance mechanism to support the reserve pooling mechanism. This will initially involve expanding current ADB and ASEAN Secretariat work that objectively monitors economic performance and assesses financial vulnerabilities. The negotiated institutional structure approved by the 13 members of ASEAN+3 could provide the basis for future rules-based regional institutions.

To further strengthen cooperation and ensure regional and global financial stability, discussions are on-going in respect to the establishment of a high-level AFSD which would include officials from finance ministries and central banks, as well as other financial regulators and supervisors. The AFSD could coordinate supervisory and regulatory developments and monitor potential financial vulnerabilities through the use of an objective EWS and other mechanisms, and engage the private sector in financial market development.

Lessons can also be drawn from Europe's response to the current situation where several new EU institutions are being established for systemic risk.[62] These include two new pillars of the EU framework: (i) the European Systemic Risk Board (ESRB), which is macroprudential in focus; and (ii) the European System of Financial Supervisors (ESFS), which is microprudential in focus. The new EU institutions will coordinate with international institutions such as the IMF and the FSB, as well as coordinate with national institutions.

4.3 Designing Effective Regulatory and Supervisory Systems

In addressing the scope and coverage of regulation, in addition to macroprudential supervision, a second challenge is the overarching design and structure of the financial regulatory and supervisory system, and its ability to adequately address gaps and reduce the potential for regulatory arbitrage. In the context of the financial stability issues which arose during the global financial crisis, given that many issues arose from regulatory gaps and divisions, an important aspect is to consider the system in a broad and integrated way. In this context, Asian jurisdictions would benefit from an in-depth analysis of the structure and coverage of their respective regulatory systems. Beyond domestic reviews, regional and international reviews would also be beneficial—at the international level through the IMF–World Bank Financial Sector Assessment Program (FSAP)[63] and/or the FSB, and at the regional level through ADB or other regional organizations such as the emerging AFSD.

Overall, a number of lessons have emerged in relation to regulatory design.[64] First, individual jurisdictions must examine the advantages and disadvantages of possible

[62] For discussion, see Andenas, Arner, and Leung (2010). For application of the EU experience in the context of Asia, see Arner, Lejot, and Wang (2009).

[63] ADB participated for the first time in a banking sector vulnerability assessment in June 2010. The assessment was for the Republic of Georgia.

[64] For a detailed discussion, see Arner and Lin (2003).

change, including the risks inherent in the change process. Second, a number of basic structures are possible including the traditional sectoral model (with separate regulators for each financial sector—banking, securities, and insurance—often combined with strict separation or holding company structures for financial conglomerates); the functional model (with separate regulators for each regulatory function—financial stability, prudential, market conduct, and competition regulation—catering to financial conglomerates and product innovation); the institutional structure (with separate regulators for different types of financial institutions, most typically adopted in the context of banks with operations in multiple sectors such as securities and insurance); and the integrated structure (with one or more sectors and/or functions combined in a single agency, often combined with a universal banking model for financial services provision).[65] It cannot be taken for granted that a particular model is better than any other; this depends on particular circumstances of the jurisdiction.

Under the integrated or single regulator structure, an economy has a single financial regulator responsible for all aspects of the financial system and financial supervision. This model has been adopted in for example the UK (Financial Services Agency [FSA]),[66] Swedish Financial Supervisory Authority [FSA], Japan (Financial Supervisory Agency [FSA]) and Singapore (Monetary Authority of Singapore [MAS]).[67] This model is generally seen to integrate well with universal banking, but can also work with other structures of financial intermediary activities and financial conglomerates. While this model appeared to be gaining in prominence prior to the global financial crisis, this may no longer be the case, with arguments suggesting its main weaknesses may be an excess of objectives and coverage since a financial regulator that does everything may not do anything well.

[65] For a detailed discussion of major models and their implementation in various jurisdictions, see Arner and Lin (2003). This analytical division is generally used outside the US as well as by the IMF. For an alternative framework of analysis (adopted in the US), see Group of 30 (2008). Under the G30–US framework, there are also four models (i) functional, (ii) institutional, (iii) twin peaks, and (iv) integrated. Under this framework, the functional model is largely equivalent to the more generally-used sectoral model. The institutional model is largely equivalent to the more generally-used functional model. The integrated and twin peaks models are equivalent in both the US–G30 and international–IMF formulations. The G30–US framework does not have an equivalent to the international–IMF functional approach. To further complicate matters, in its recent review of regulatory reform options, the US Treasury suggested there are four main options: (i) institutionally-based functional regulation (the current US model), (ii) activities-based functional regulation (a model based on regulators assigned specific functions within the financial system), (iii) consolidated regulation (the model in the UK), and (iv) objectives-based regulation (the model in Australia). As a result, the definition of that terminology being used is of significant importance in this context. See US Department of the Treasury (2008), p. 138-42.

[66] The British government has recently announced that it will be moving towards a twin peaks system, with prudential responsibilities shifted to the Bank of England.

[67] In both the UK and Japan, the FSA is a separate agency from the central bank—the Bank of England and Bank of Japan, respectively. In this structure, the central bank is responsible for monetary policy and financial stability, while the FSA is responsible for financial regulation. The UK has also adopted a single statutory framework for the FSA and financial regulation, the Financial Services and Markets Act 2000. In Japan, there are separate statutes dealing with individual financial sectors—banking, securities, insurance—but administered by the FSA. In Singapore, the MAS combines the roles of central bank and financial regulator. The statutory framework in Singapore comprises individual laws for each major sector, administered by the MAS.

Under the sectoral regulation model, an economy has separate regulators for each financial sector (typically, banking, securities, and insurance). This model has been adopted in the majority of economies around the world, including the US and PRC.[68] This model works best with a system of strict sectoral separation of financial intermediary activities. It is also often used in economies which have adopted the financial holding company model or the parent–subsidiary model. It does not work well with universal banking models. The recent experience of the US highlights that it may also not be ideal in the context of financial holding company models, due to potential difficulties in coordination and coverage. In addition, in financial sectors where cross-sectoral activities are allowed and traditional distinctions between markets, institutions, and products are blurred, such structures arguably provide potential for significant regulatory arbitrage and gaps in coverage.

Under the functional regulation model, an economy has separate regulators for separate functions, including (i) financial stability regulation, (ii) prudential regulation of financial intermediary safety and soundness, (iii) financial market conduct, and (iv) competition. This model has been adopted in Australia and Canada (with some variations), two of the developed countries which have not experienced serious financial sector problems in the recent crisis.[69] Arguments in favor of this model suggest that clear objectives enhance regulatory performance and accountability.

Financial stability regulation and prudential regulation are often combined in a single agency, with a separate agency responsible for financial market conduct (e.g., the twin peaks approach).[70] This model can work with any model of financial intermediary activities and financial conglomerate structure. It has been adopted in the Netherlands and France. In the wake of the global financial crisis increasing attention is being placed on the twin peaks structure due to failures in the single regulator approach in for example the UK and the sectoral approach in the US,. It is to be adopted in the UK[71] and it is being considered in Hong Kong, China.[72]

Under the institutional regulation model, all activities of a given type of financial intermediary are regulated by one regulator, regardless of the specific type of activity

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[68] The PRC has the clearest examples: People's Bank of China (central bank), China Banking Regulatory Commission (responsible for banking regulation), China Securities Regulatory Commission (responsible for securities regulation), and the China Insurance Regulatory Commission (responsible for insurance regulation). Each regulator is established under and responsible for a separate statutory framework, with cross-sectoral activities generally prohibited, though increasingly being allowed, especially between banks and securities activities. For a detailed discussion, see Barth et al. (2006). The US regulatory system is exceptionally complex and this complexity and resulting overlaps and gaps in jurisdiction are now regarded as significant contributors to the subprime crisis. See US Department of the Treasury (2008).

[69] In Australia, the Reserve Bank of Australia (RBA) as the central bank is responsible for monetary policy and financial stability, the Australian Prudential Regulatory Agency (APRA) is responsible for regulating the safety and soundness of all significant financial institutions, the Australian Securities and Investments Commission is responsible for market conduct and financial product regulation, and the Australian Competition Commission is responsible for competition and antitrust.

[70] See Taylor (1995).

[71] See US Department of the Treasury (2008).

[72] See Arner, Hsu, and Da Roza (2010).

being undertaken. This model has not been adopted anywhere on a system-wide basis; however, it is frequently adopted for banking regulation, in which all activities banks, regardless of their nature, are regulated by the banking regulator through consolidated supervision. The most common structure resulting from the special systemic risks posed by banks and their activities, whether financial or non-financial, cross-sectoral or not, is regulation by the banking regulator, usually the central bank, with the balance of regulatory responsibility allocated on a sectoral basis. This is the traditional structure which has been developed in many jurisdictions, including across Asia. This model has the advantage of centralizing regulation and a lender of last resort in a single institution. In addition, in Asia, where the majority of financial systems are centered around banks, it provides a centralization of expertise focused on the institutions which have traditionally been viewed as the greatest source of potential systemic risk. At the same time, as financial systems develop and other institutions emerge, additional sources of systemic risk may arise beyond the banking system, as was the case in Thailand during the 1997/98 Asian financial crisis.

There is no general consensus on which model is best. However, there is an important relationship among regulatory structure (and attendant financial and human resources), financial structure (the relative importance of banking, insurance, and capital markets and the level of financial development), and the structure of financial institutions (e.g., strict separation of financial sectors versus universal banking). The fundamental issue is how to appropriately tailor an economy's financial regulatory structure to its own circumstances and structure for addressing financial intermediary activities and financial conglomerates. To the extent that systemically important financial institutions, instruments, and markets are unregulated, or opportunities for regulatory arbitrage exist, the potential risks for future instability increase.

With this in mind, regulatory structure must be designed to coincide with an economy's financial structure.[73] There must be full coverage of the intermediaries (especially financial conglomerates), functions, and risks inherent in a given financial system, in such manner that coincides with the history, culture, legal system, and level of financial development of that economy. An additional risk involves financial structure and regulatory design—a potential financial and regulatory mismatch. The risk is that a jurisdiction's financial regulatory structure will not equate with the structure of its financial sector; financial intermediaries will be organized on a basis not appropriately addressed by the regulatory structure. In such circumstances, it is possible that significant risks may develop through financial intermediary operations which are not supervised by the existing structure. For example, in a financial system requiring strict separation of financial institutions and activity across sectors (e.g., the US Glass–Steagall model or the model until recently in use in the PRC), informal financial groups may develop that are regulated not on a group basis, but rather on a sectoral institutional basis, leaving the financial system exposed to the risks of the group.

Finally, a key issue highlighted in systems in which the regulatory functions are separated from the central bank is coordination, especially in the context of macroprudential supervision and liquidity provision. In economies where these functions are separated, the global financial crisis has underlined an absolutely fundamental need

[73] For a full discussion of financial structure, see Arner (2007).

for robust information-sharing and coordination arrangements, especially in times of crisis.

To date, international consensus and guidance on structural issues has been limited, with design being a domestic matter. Following G20 directions, in September 2009, IOSCO released guidance related to unregulated financial markets and products.[74] In October 2009, the IMF and FSB discussed information gaps in regulation, including those resulting from regulatory design.[75]

Most significantly, in January 2010, the Joint Forum—comprising the BCBS, IOSCO, and the International Association of Insurance Supervisors (IAIS)—released an initial review of related issues.[76] The Joint Forum emphasized four fundamental guiding principles: (i) similar activities, products and markets should be subject to similar minimum supervision and regulation; (ii) consistency is necessary, however, legitimate differences can exist across sectors; (iii) supervision and regulation should consider the risks posed, particularly any systemic risk, which may arise not only in large financial institutions, but also through interactions and interconnectedness among institutions of all sizes; and (iv) consistent implementation of international standards is critical to avoid competitive issues and regulatory arbitrage. In supporting these principles, the review focused on 17 recommendations in five areas: (i) key regulatory differences across the banking, securities, and insurance sectors; (ii) supervision and regulation of financial groups; (iii) mortgage orientation; (iv) hedge funds; and (v) credit risk transfer products.

In relation to reducing regulatory differences, the Joint Forum's recommendations included (i) consistency across sectoral financial principles (e.g., the BCBS Core Principles of Effective Banking Supervision) and organizations (e.g., the BCBS, IOSCO, IAIS, and IASB), (ii) development of uniform capital standards for insurance and securities similar to those for banking, and (iii) development of cross-sectoral standards as necessary (e.g., in relation to mortgage origination and credit risk transfer).

In relation to financial groups, recommendations focused on ensuring that all financial groups, particularly those operating cross-border, are subject to comprehensive regulation and supervision on the basis of updated international standards addressing conglomerates, and that supervisory colleges operate consistently across sectors and cross-sectoral issues are appropriately addressed.

Given the central role of regulatory gaps and regulatory arbitrage in the global financial crisis, these are issues that are likely to be central to future IMF and FSB regulatory reviews, and hence a key focus for Asian jurisdictions, especially G20 and FSB members. In Asia, particular concerns arise in the context of complex financial groups of systemic significance.

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[74] IOSCO (2009f).

[75] IMF and FSB (2009).

[76] Joint Forum (2010).

5. Pillar III: Addressing Systemically Important Financial Institutions and Financial Institution Resolution

In June 2010, the G20 identified addressing systemically important financial institutions and financial institution resolution as the third pillar of its financial regulatory reform agenda.[77] Globally, the financial crisis has highlighted that in addition to effective monetary policy frameworks, economies must have in place effective financial stability arrangements, extending crisis resolution as well as prevention. At the early stages of the recent crisis, the Bank of England and the US Federal Reserve found themselves less effectively equipped in the context of liquidity provision than the European Central Bank, with both the Bank of England and the US Federal Reserve forced to dramatically extend their existing arrangements to non-traditional institutions and collateral. Clearly, Asian economies must review existing liquidity provision arrangements to address coverage, scope (especially relating to collateral availability), moral hazard, and coordination across financial agencies as well as regionally and internationally. In relation to government intervention, Asian governments have had to intervene to a lesser extent than those of the US and Europe, but based on experiences in the Asian financial crisis, planning in advance, especially for the failure of major financial institutions—whether domestic or foreign—is necessary. In this context, there needs to be in place a comprehensive financial sector safety net, including a contingency plan, to address the failure of any financial institution operating within a given economy, as well as consumer protection measures such as deposit insurance.

5.1 Cross-border and Systemically Important Financial Institutions

Cross-border and systemically important financial institutions—non-bank financial institutions such as investment banks, insurance companies, and the shadow banking system of conduits; and SIVs—were at the heart of the global financial crisis. Around the world, a key lesson of the crisis is the need for appropriate regulatory and supervisory arrangements for such institutions, especially large complex global financial institutions, regardless of their form.

In relation to cross-border and systemically important financial institutions, in November 2008, G20 leaders agreed to (i) establish supervisory colleges for significant cross-border firms; (ii) implement the FSB principles for cross-border crisis management and ensure that home authorities of each major international financial institution with a common interest in that financial institution meet at least annually; (iii) support continued efforts by the IMF, FSB, World Bank, and BCBS to develop an international framework for cross-border bank resolution arrangements; and (iv) continue to cooperate on the subject of exit strategies.

In their April 2009 meetings, the G20 and FSF addressed these issues in detail, building upon previous agreements in most cases and in some cases going further, with G20 leaders stating in their communiqué that "[m]ajor failures in the financial sector and in financial regulation and supervision were fundamental causes of the crisis,"[78] and

[77] G20 (2010), p. 5.

[78] G20 (2009c), para 13.

committing "to extend regulation and oversight to all systemically important financial institutions, instruments, and markets".[79]

In an annex to the April 2009 London communiqué in support of these general principles, the G20 established an outline of approaches going forward, with the FSB[80] tasked, *inter alia,* to "set guidelines for, and support the establishment, functioning of, and participation in, supervisory colleges, including through ongoing identification of the most systemically important cross-border firms" and to "support contingency planning for cross-border crisis management, particularly with respect to systemically important firms,"[81] including "to support continued efforts by the IMF, FSB, World Bank, and BCBS to develop an international framework for cross-border bank resolution arrangements."[82] At the same time, reflecting that such efforts are in most cases still at an early stage, the G20 recognized "the importance of further work and international cooperation on the subject of exit strategies."[83]

In respect of large complex financial institutions, the G20 confirmed that "large and complex financial institutions require particularly careful oversight given their systemic importance",[84] reflecting the conclusions of a supporting working group chaired by Canada and India.[85] In this respect, the working group concluded that "[l]arge complex financial institutions require particularly robust oversight given their systemic importance, which arises in part from their size and interconnectedness (or correlation) with other institutions, and from their influence on markets." The G20 assigned responsibility to the FSB and prudential supervisors at all levels—domestic, regional, and international.[86]

The FSB has focused on three aspects: (i) reducing the probability and impact of failure through regulation and supervision, (ii) improving resolution capacity and preparedness, and (iii) strengthening core financial infrastructure and markets.[87] As an initial step, the IMF, BIS, and FSB have developed guidance on assessing the systemic importance of financial institutions, markets, and instruments,[88] addressing questions relating to systemically important institutions as well as macroprudential considerations. In addition, the IMF and FSB have analyzed information gaps in cross-border institutions and their supervision.[89] Supervisory colleges have been the major mechanism to be adopted, with

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[79] Ibid., para 15.

[80] FSF Press Release (2009c). As part of the process, the FSB's mandate was reconstituted to include, *inter alia*, to "set guidelines for and support the establishment of supervisory colleges" and "manage contingency planning for cross-border crisis management, particularly with respect to systemically important firms." Ibid., para 9.

[81] G20 (2009e), p. 1.

[82] Ibid., p. 2.

[83] Ibid.

[84] Ibid.

[85] G20 (2009a), p. ii.

[86] Ibid., p. xii.

[87] FSB (2009b), p. 9.

[88] IMF, BIS, and FSB (2009).

[89] IMF and FSB (2009)

such arrangements established for more than 30 large complex financial conglomerates and coordinated through the FSB, with similar arrangements being developed through European bodies for European systemically important financial institutions.[90] In addition, institution-specific recovery and rapid resolution plans, known as living wills, will be developed by end-2010.[91]

In June 2010, the FSB released an initial report on reducing moral hazard risks posed by systemically important financial institutions.[92] Further, in June 2010, the G20 tasked the FSB to develop recommendations to address problems associated with and resolve systemically important financial institutions, including financial sector responsibilities for associated costs.[93]

In Asia, as financial institutions continue to regionalize their operations in the wake of the global financial crisis and continued economic development and integration, questions of regional colleges will gain merit, as will treatment of Asian institutions through international arrangements.

More significantly, common with many markets around the world (the major exception historically being the US), most jurisdictions in Asia have concentrated banking systems, with a small number of banks dominating most markets. In addition, Asia is dominated by bank-centered financial systems, which increases the concentration of risks (arising from simultaneous shocks) in individual financial systems and across the region, as was the case during the 1997/98 Asian financial crisis. Moreover, in many jurisdictions, these dominant banks have close connections with the state, making any potential problems arising in such institutions both economically and politically significant. Such dominant and systemically important institutions raise not only special concerns for financial stability but also in the context of moral hazard, given their significance and interconnection, economically and politically. Such issues were central to the 1997/98 Asian financial crisis and indicate that regulation and supervision, especially of dominant banks in individual economies in Asia, are of significant and continuing concern, and rate the highest level of attention from both domestic regulators and regional cooperative mechanisms.

Beyond major banks, the Asian financial crisis also highlighted the risks of systemically significant non-bank financial institutions in Asia, underlining the significance of effective macroprudential arrangements and well-designed regulatory structure, as well as the

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[90] FSB (2009b), p. 13. The BCBS has developed draft guidance on supervisory colleges. BCBS (2010b).

[91] G20 (2010), p. 18.

[92] FSB (2010f).

[93] G20 (2010), p. 5 and 18. According to the FSB report (2010f), guidance will be built on the following principles: (i) all jurisdictions should have in place a policy framework to reduce the moral hazard risks associated with systemically important financial institutions in their jurisdictions, (ii) all jurisdictions should have effective resolution tools that enable authorities to resolve firms without systemic disruptions and without taxpayer losses, (iii) all jurisdictions should have the capacity to impose prudential requirements on firms commensurate with their systemic importance, (iv) all national supervisory authorities should have the powers to apply differentiated supervision requirements for institutions based on the risk they pose to the financial system, (v) all jurisdictions should put in place or strengthen core financial market infrastructure to reduce contagion risk upon a firm’s failure and encourage their use, and (vi) FSB members will establish an ongoing peer review process to promote national policies to address the risks associated with systemically important financial institutions .

need for making sure that any systemically important financial institution in the region is subject to appropriate and effective regulation and supervision, regardless of its legal form.

In the context of systemically important banks and other financial institutions, especially those with government involvement, individual jurisdictions will have to carefully consider the sorts of risks that such institutions will be allowed to undertake. Internationally, related debate currently centers around the proposal in the US, known as the Volcker Rule, to limit trading activities of banks. While it is arguable that a Volcker Rule prohibiting banks from engaging in proprietary trading would not, in fact, have prevented the global financial crisis (and this argument in all likelihood even extends as far as the pre-1999 US separation between banking and securities in the context of the Glass–Steagall system), jurisdictions in Asia will need to carefully balance the sophistication of their major banks and other financial institutions, level of development of their markets (especially in terms of cross-sectoral activities), effectiveness of their regulatory and supervisory arrangements and, most importantly, personnel.

A second emerging issue concerns financial sector contributions for government support. In June 2010, the IMF outlined a range of options and approaches.[94] One approach is a levy on financial institutions. Such a levy could be used as an incentive for financial institutions to remain below a certain systemically significant size. It could also be a mechanism of pre-funding resolution arrangements or as a source of general government revenue. Other alternatives include a range of transaction taxes to reduce the profitability of certain speculative financial activities. In June 2010, the G20 agreed that the financial sector should make a "fair and substantial contribution" towards paying for any burdens associated with government interventions to repair the financial system or fund resolution.[95] While there was no agreement to adopt a single international approach, the G20 did agree to five guiding principles for any approach: (i) protect taxpayers, (ii) reduce risks arising from the financial system, (iii) protect the flow of credit in good and bad times, (iv) take into account an individual country's circumstances and options, and (v) help promote a level playing field.

Although no single arrangement has been adopted internationally, such arrangements are being considered at the regional level, as is the case in Europe, and could be considered in ASEAN+3.

The global financial crisis has shown that not only domestic institutions pose potential systemic risk but also foreign financial institutions—whether banks or otherwise. Foreign institutions therefore must also be subject to appropriate regulation and supervision in each jurisdiction in which they operate, across regions in which they are potentially systemically important, as well as globally, with regulatory colleges being an appropriate starting point for such institutions at each level: domestic, regional, and international. In the context of regional colleges, an AFSD could play the central coordinating role.

[94] IMF (2010a).

[95] G20 (2010), p. 18.

5.2 Liquidity Arrangements

Liquidity arrangements were central to addressing the systemic phase of the global financial crisis, including domestic measures (especially in the US and UK), regional measures (through the European Central Bank), and international measures (primarily through bilateral swap lines from the US Federal Reserve).

There is a mixture of implicit and explicit structures for liquidity provision, which prior to the crisis was generally referred to in the context of a lender of last resort. In most cases, the lender of last resort is the central bank, but in some cases it can be the deposit insurance authority, usually in conjunction with the central bank.

Under the prevailing pre-crisis formulation, the provision of liquidity support in the context of lender of last resort operations generally followed the following rules: (i) support should only be provided to temporarily illiquid but solvent banks; (ii) support should be provided freely but at penalty interest; (iii) support should be provided to anyone with good collateral who meets both rules (i) and (ii); (iv) the lender of last resort should clearly indicate its readiness to lend *ex ante*, (v) nonetheless, the decision to provide support should remain discretionary, and (vi) this discretion should be based upon the test of the existence of potential systemic risk.

Based on experiences during the global financial crisis, there were two main weaknesses in this formulation and its operation. First, although Bagehot's original formulation was not explicitly limited to banks, as practiced up to the global financial crisis, the general rule applied by central banks operating as lenders of last resort was to limit the availability of support to systemically significant banks. In retrospect, this formulation, when tied to the regulatory focus on banks rather than all systemically significant institutions and markets, made responses to the initial stages of the crisis difficult, especially in the US. In Asia and elsewhere, lender of last resort support (perhaps more appropriately: liquidity provider of last resort) needs to be available across the financial system to any illiquid but solvent and systemically significant financial institution or market.

Beyond this central issue, liquidity provision was also limited by a range of legal and institutional factors. While the lender of last resort is typically not thought of in terms of legal issues, in fact, the formulation is clearly based upon the presupposition of a functioning legal system supporting financial transactions, as well as upon an effective regulatory and supervisory process.

In the context of eligible institutions and markets, certainly the US Federal Reserve was limited in its ability to extend assistance beyond regulated banks by its legal framework. "Temporarily illiquid but solvent" requires two sets of preconditions: (i) supervisory information in order to determine the respective condition; and (ii) a definition of insolvency, which is generally the result of a public policy choice enshrined in insolvency legislation. "Freely but at penalty interest," fortunately, is relatively self-sufficient, except that the liquidity provider must have the ability to provide potentially unlimited support, which will often only be available through control over the monetary supply of the relevant currency—another issue which arose in the context of the global financial crisis and eventually required the creation of extensive swap lines by the US Federal Reserve and others. "Anyone with good collateral" clearly requires both a legal judgment and a

qualitative judgment. The legal judgment is based upon the ability to take collateral—different legal systems vary greatly on this point. "Readiness to lend *ex ante*" requires a legal system that supports lending, which is very much determined by the respective system of private law. The remaining two criteria simply require an effective system of information gathering on the part of the liquidity provider in order to make the respective determination. If that system were perfect, of course, there would be no need for the support in the first place.

Based on experiences during the global financial crisis, it is clear that financial authorities should develop appropriate systems of liquidity support for financial institutions and the financial system generally. As such, the legal foundation for liquidity provision needs to be carefully considered in each jurisdiction in the context of regulatory arrangements, macroprudential systems and financial structure. More specifically, both the Bank of England and the US Federal Reserve during the crisis faced specific limitations as a result of pre-existing collateral policies and related legal frameworks which especially limited the Bank of England in liquidity provision at key points in the early stages of the crisis. In contrast, the European Central Bank in the years prior to the crisis had spent considerable effort in supporting the development of effective collateral legal frameworks across the euro area, meaning that during the crisis it could more easily draw upon alternative sources and mechanisms for collateralizing liquidity support. While there are significant potential benefits of effective collateral legal frameworks to financial sector development[96] from the standpoint of financial stability, Asian central banks would be well-advised to carefully consider potential collateral arrangements and underlying legal frameworks—a continuing weakness in many jurisdictions across the region.[97] Further, given that a number of jurisdictions in Asia experienced bank runs during the global financial crisis and many more have experienced them in the past 15 years, this is an area of clear concern and relevance in the region.

5.3 Deposit Insurance and Investor Protection Arrangements

Like liquidity arrangements, deposit insurance arrangements have been central to addressing systemic issues, including in Asia.

In analyzing depositor protection schemes, it is first necessary to place them in the appropriate context as one aspect of an overall financial safety net designed to prevent systemic risk and maintain financial stability. In general terms, the financial safety net has developed out of specific regulatory objectives to form the traditional regulatory and supervisory process. In this process, the key authorities and their functions include monetary policy authorities, supervisory authorities, liquidity provider of last resort, deposit insurance authorities, and insolvency authorities, among others.

Deposit insurance provides a non-contingent guarantee on certain deposits. The liquidity provider of last resort, on the other hand, is contingent. The injection of liquidity in times of crises is not mandatory, but rather it is subject to the discretion of the central bank or other authority. Thus, explicit deposit insurance provides legal certainty regarding the

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[96] See Arner et al. (2006).

[97] See Arner et al. (2007).

coverage of insured depositors. There is always a degree of uncertainty—some economists refer to it as constructive ambiguity—regarding the provision of emergency liquidity assistance by the central bank. Also, while explicit deposit insurance protects mainly depositors, the liquidity provider of last resort protects mainly the financial system and encompasses systemic considerations.

To minimize the risk of moral hazard, it is important to delineate what each institutional arrangement can do and what it cannot or should not do. Explicit deposit insurance can protect insured depositors, but it cannot—and should not—protect other depositors or creditors, shareholders, or managers. Explicit deposit insurance cannot protect insolvent banks, because it can only be activated once a bank is closed. The liquidity provider can provide emergency liquidity—quick cash up front—over a short period of time, when no other sources of funding are readily available. What the central bank should not do is lend over an extended period of time or commit funds without the explicit approval of the fiscal authority.[98]

As the starting point, any form of depositor protection can either be implicit or explicit. In addition, it is clearly possible for any jurisdiction to have no such system in place at all. While some suggest that no system is in fact an implicit government guarantee, it is possible—although certainly not politically easy—to not provide government support at all. On occasion, governments have managed to stand aside. In most cases, however, having no deposit insurance system in place does reflect an implicit government guarantee, at least for depositors of the largest financial institutions.

Explicit systems generally take one of two forms: (i) an explicit blanket guarantee of all deposits or (ii) an explicit, limited-coverage system of deposit insurance. Each raises a variety of issues.

Explicit deposit insurance, such as the creation of a deposit guarantee scheme by law, with rules on the extent of the insurance or protection, the scheme, and the type of deposits or depositors protected can be a useful instrument of prudential bank regulation. Indeed, explicit deposit insurance has traditionally served two purposes: (i) consumer protection and (ii) the prevention of bank runs. A third rationale of explicit deposit insurance is that it allows the public authorities to close banks more easily, as it becomes politically acceptable to liquidate insolvent institutions, in the knowledge that less sophisticated depositors are protected.

Under an explicit deposit guarantee scheme, depositors are only paid once the bank is closed. Thus, there can be no deposit insurance if the bank remains open. Therefore, explicit deposit insurance presupposes that a bank has failed and, hence, it is not compatible with the "too big to fail" doctrine—the subject of the preceding discussion regarding regulation of systemically important financial institutions.

Implicit deposit insurance, as opposed to explicit deposit insurance, is a blanket guarantee for all kinds of depositors (insured and uninsured), other creditors, shareholders and even managers. Implicit deposit insurance often presupposes that the bank remains in business either because it is too big to fail or because it is politically difficult to close the bank, thus creating pervasive moral hazard incentives. While explicit

[98] Lastra (1996).

deposit insurance is applied *ex post* following the closure of a bank, implicit deposit insurance is often applied while a bank is still in operation—the government steps in to prop up a bank instead of closing the bank.

A well-designed explicit deposit insurance scheme should only inflict limited damage upon taxpayers (the current situation of Iceland being a significant heuristic counterexample), and, depending on the funding of the scheme, there may be no damage at all. However, implicit deposit insurance has the potential of shifting the burden onto taxpayers, since rescue packages tend to be financed by the government. The use of rescue packages results not only in moral hazard considerations, but might also affect competition, especially if applied in the context of systemically significant financial institutions.

An explicit blanket guarantee can take either a strict legal form or simply be a government pronouncement or policy. Either would likely be sufficiently clear and robust for purposes of confidence. The difficulty arises if the government decides to eliminate the guarantee and move to an explicit, limited-coverage system of deposit insurance. Japan, Korea, and Sweden are among those economies that appear to have made successful transitions from blanket guarantees to limited, explicit systems. A range of jurisdictions in Asia, including Singapore and Hong Kong, China, will soon face a similar challenge.

Explicit deposit insurance is a guarantee limited to one type of preferred creditors—insured depositors. Under explicit deposit insurance, uninsured depositors, other creditors, shareholders, and managers are not protected. Therefore, explicit deposit insurance is more compatible with market discipline, as uninsured depositors and other creditors have an interest in monitoring the solvency of the bank while still in operation. Explicit deposit insurance must be set at a level that enables national authorities to accept the political consequences of bank liquidations—a common problem in jurisdictions that have set low levels of explicit protection.

Explicit deposit insurance, by limiting the protection of insured depositors, exposes uninsured depositors, general creditors, subordinated debt holders, shareholders, and management to increased risk exposure, thereby encouraging them to monitor and limit the riskiness of the bank. In the absence of open bank assistance, management will also be inclined to run the institution in a prudent manner or risk being removed from office. Theoretically, these incentives are very important, particularly in the case of shareholders, whose limited liability renders them more prone to lend on a high risk–high return basis, while restricting their own exposure through high leverage. However, experiences during the global financial crisis have brought into question many views of the potential value of such monitoring arrangements.

Recognizing that existing guidance was insufficient, in June 2009, the BCBS and the International Association of Deposit Insurers (IADI), which was established in May 2002,[99] released an extensively revised set of principles for deposit insurance.[100] The

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[99] The IADI is hosted by the BIS but is not presently included in the FSB. There are currently 13 Asian members: Bangladesh Bank, Central Deposit Insurance Corporation (Taipei,China), Deposit Insurance and Credit Guarantee Corporation–Reserve Bank of India, Deposit Insurance Corporation of Japan, Deposit Insurance of Viet Nam, Deposit Insurance Protection Agency of Thailand, Hong Kong Deposit

standards, comprising 18 principles in 10 groups, address: (i) setting objectives (principles 1–2), (ii) mandates and powers (principles 3–4), (iii) governance (principle 5), (iv) relationships with other safety-net participants and cross-border issues (principles 6–7), (v) membership and coverage (principles 8–10), (vi) funding (principle 11), (vii) public awareness (principle 12), (viii) selected legal issues (principles 13–14), (ix) failure resolution (principles 15–16), and (x) reimbursing depositors and recoveries (principles 17–18).

In Asia, initial challenges will be faced by jurisdictions which have put in place blanket guarantees. In these jurisdictions, there is a clear necessity to review existing arrangements to identify weaknesses which required the use of the blanket guarantee as a backstop in the context of the crisis. Based on experiences in the global financial crisis, it is likely that many of these weaknesses resulted from inadequate coverage (in both banks and non bank-financial institutions) as well as improperly designed payout systems, in which depositors faced long delays in payment, thus incentivising runs. In relation to the latter, the UK's experience with Northern Rock and a theoretically incentive-enhancing system of shared loss in fact incentivized the bank run. In moving from blanket guarantees to improved defined coverage systems, jurisdictions can maximize understanding and thereby effectiveness by focusing not only on the design of the system, but also on communicating the removal of the guarantee and disseminating details of the system.

The experience of Iceland also indicates that actual funding arrangements are central to effectiveness of the insurance system and in limiting potential fiscal damage.

Other jurisdictions in Asia still maintain implicit guarantees—often in the financial systems with large, systemically important and in some cases government-connected banks and other financial institutions. Such jurisdictions should carefully review their safety net design in the context of reviewing regulatory and supervisory arrangements for systemically significant financial institutions (discussed in section 5). In this context, there is a need for careful balancing of reality (large financial institutions will often not be allowed to fail) and real moral hazard risks. In jurisdictions where large financial institutions are unlikely to be allowed to fail under any circumstances, the corollary is that the risks that these institutions undertake must be strictly limited. At the same time, even in the context of the largest financial institutions, having in place an explicit system of deposit insurance and other compensation arrangements for financial institution customers (especially insurance customers) has the potential to enhance incentives of management and reduce moral hazard.

Protection Board, Indonesia Deposit Insurance Corporation, Kazakhstan Deposit Insurance Fund, Korea Deposit Insurance Corporation, Malaysia Deposit Insurance Corporation, Philippine Deposit Insurance Corporation, and Singapore Deposit Insurance Corporation. There are also four Asian associate organizations: Bank of Mongolia, Monetary Authority of Singapore, Bangko Sentral ng Pilipinas, and Bank of Thailand. The Asian Development Bank Institute (ADBI) is a partner organization.

[100] BCBS and IADI (2009).

5.4 Financial Institution Resolution Arrangements

Overall, it is clear that the systemic phase of the current global financial crisis was triggered by the failure of large complex global financial conglomerates. In this context, as recognized by the G20, one of the greatest failures of both international and domestic legal and regulatory systems has been the lack of appropriate arrangements, including adequate insolvency arrangements, to address such failures when they occur. Following the difficulties experienced in dealing with the failure or near-failure of large complex global financial conglomerates such as Lehman Brothers and AIG, the central approach is a framework based upon prevention of failure as the first element and mechanisms to address failure when they occur as the second.

In the context of financial institution resolution arrangements, the most significant element is the increased focus on mechanisms to address failure of financial institutions operating on a cross-border basis—a problem that is not easy to solve and one which is likely to require significant time and effort before a workable approach is reached.[101] The G20 identified shortcomings in resolution procedures for financial institutions as a particular weakness in the context of the crisis: "Existing procedures for resolving troubled institutions have been shown to be inadequate when an institution imposes substantial systemic risks. In addition, national resolution mechanisms have not been effective in some cross-border resolutions."[102] However, the working group did not address related issues, leaving such issues to a second G20 working group.[103]

G20 working group 2, *inter alia*, recognized the problems posed especially in the cross-border context and supported on-going work "to develop an international framework for cross-border bank resolutions, and to address the issue of ring-fencing and financial burden-sharing. "[104] In the absence of such arrangements, the working group advocated the development of regional resolution systems in the medium-term.

In addition, the FSF released the most significant attempt to date to address issues of failure resolution.[105] In this set of principles, the FSF stated "[t]he objective of financial crisis management is to seek to prevent serious domestic or international financial instability that would have an adverse impact on the real economy".[106] At the same time, the FSF recognized that such financial crisis management "remains a domestic competence," albeit one requiring cross-border cooperation.[107]

In relation to preparation, authorities are to:

> [d]evelop common support tools for managing a cross-border financial crisis, including these principles: a key data list; a common language for assessing

[101] See Arner and Norton (2009).

[102] Ibid., p. v.

[103] G20 (2009b).

[104] Ibid., p. 5, 18-20.

[105] FSF (2009b); see also FSF (2009f).

[106] Ibid., para. 1.

[107] Ibid., para. 2.

> systemic implications (drawing on those developed by the [EU] and by national authorities); a document that authorities can draw on when considering together the specific issues that may arise in handling severe stress at specific firms; and an experience library, which pools key lessons from different crises.[108]

In addition, supervisors will meet at least annually through the college framework,[109] share a range of information on large complex financial institutions,[110] and ensure that firms have internal contingency plans in place.[111]

In managing financial crises, authorities are to:

> [s]trive to find internationally coordinated solutions that take account of the impact of the crisis on the financial systems and real economies of other economies, drawing on information, arrangements, and plans developed ex-ante. These coordinated solutions will most likely be mainly driven by groups of authorities of the most directly involved economies.[112]

In June 2010, G20 leaders committed to "design and implement a system where we have the powers and tools to restructure or resolve all types of financial institutions in crisis, without taxpayers ultimately bearing the burden".[113] Leaders endorsed the recommendations of the BCBS on cross-border bank resolution,[114] stating that resolution regimes should provide for[115]

- (i) proper allocation of losses to reduce moral hazard and protect taxpayers;
- (ii) continuity of critical financial services, including uninterrupted service for insured depositors;
- (iii) credibility of the resolution regime in the market;
- (iv) minimization of contagion;
- (v) advanced planning for orderly resolution and transfer of contractual relationships; and
- (vi) effective cooperation and information exchange domestically and among jurisdictions in the event of a failure of a cross-border institution.

The recent pronouncements from the G20 and FSB are a very useful start, especially in relation to regulation, supervision and contingency planning for financial institution

[108] Ibid., para. 3.

[109] Ibid., para. 4.

[110] Ibid., paras 5-6.

[111] Ibid., paras 7-9.

[112] Ibid., para. 11.

[113] G20 (2010), p. 5 and 17.

[114] BCBS (2010c). The 10 recommendations address (i) effective national resolution powers, (ii) frameworks for coordinated resolution of financial groups, (iii) convergence of national resolution mechanisms, (iv) cross-border effects of national resolution mechanisms, (v) reduction of complexity and interconnectedness of group structures and operations, (vi) planning in advance for orderly resolution, (vii) cross-border cooperation and information sharing; (viii) strengthening risk mitigation mechanisms, (ix) transfer of contractual relationships, and (x) exit strategies and market discipline.

[115] G20 (2010), p. 17-18.

failure. However, the statements, reports and principles, while recognizing the problems raised by such failures, largely leave actual resolution to domestic authorities. This, suggests that in the final analysis, individual jurisdictions will have to carefully consider their own arrangements with respect to the potential failure of a large complex financial institution operating within their jurisdiction and to take appropriate precautionary actions *ex ante*. Unfortunately, even in the wake of the global financial crisis, while it may be possible to develop adequate international arrangements relating to prevention of financial institution failure, there is still insufficient consensus in respect of actual insolvency arrangements for any international framework to emerge at present. In such a context, individual jurisdictions in Asia must act proactively in building preventive arrangements based on internationally agreed upon approaches. At the same time, there is likely to be a continued lack of arrangements to deal with actual insolvencies of large complex financial institutions at the international level. Individual jurisdictions should thus separately mandate capitalized subsidiaries that are subject to domestic insolvency arrangements for global firms appropriate for the activities being engaged in the individual jurisdiction. At present this is the only arrangement capable to some extent of limiting the damage in individual jurisdictions resulting from the failure of large complex cross-border financial institutions.

6. Pillar IV: Strengthening International and Regional Financial Assessment and Peer Review

The fourth pillar of the G20 financial reform agenda addresses international standards and their implementation and monitoring, focusing on international assessment and peer review. In June 2010, the G20 reaffirmed its support for the FSAP, peer review through the FSB, and related processes to address non-cooperative jurisdictions with respect to adherence to prudential standards, tax havens, money laundering, and terrorist financing.[116]

6.1 International Financial Standards and their Implementation

As was the case following the 1997/98 Asian financial crisis,[117] development and implementation of international financial regulatory and supervisory standards has been an important focus of international efforts in the wake of the global financial crisis. Following G20 agreement, the main international regulatory organization is the FSB, formed as the FSF in the wake of the Asian financial crisis and reconstituted in 2009 in response to the more recent financial crisis. Hosted by the BIS in Basel, Switzerland, the FSB brings together G20 finance ministries and central banks and/or regulatory authorities, along with the main international and regional financial institutions (BIS, IMF, World Bank, Organisation for Economic Co-operation and Development [OECD], European Central Bank, and European Commission) and international standard-setting bodies (BCBS, IOSCO, IAIS, IASB, CGFS, and Committee on Payment and Settlement

[116] G20 (2010), p. 5 and 20–21.

[117] See Arner (2007); Weber and Arner (2007).

Systems [CPSS]). In addition, there are separate international organizations addressing Islamic finance[118] and deposit insurance, among others.

6.1.1 Financial Stability Board

As reconstituted, the FSB is to (i) assess vulnerabilities affecting the financial system, and identify and oversee required actions; (ii) promote coordination and information exchange among authorities responsible for financial stability; (iii) monitor and advise on market developments and their implications for regulatory policy; (iv) advise on and monitor best practices in meeting regulatory standards; (v) undertake joint strategic reviews of the policy development work of the international standard setting bodies, such as the BCBS and IOSCO, to ensure their work is timely, coordinated, focused on priorities, and addresses any gaps, (vi) set guidelines for and support the establishment and functioning of, and participation in, supervisory colleges, including through ongoing identification of the most systemically important cross-border firms, (vii) support contingency planning for cross-border crisis management, particularly with respect to systemically important firms; and (viii) collaborate with the IMF to conduct early warning exercises to identify and report to the IMF's International Monetary and Financial Committee and the G20 finance ministers and central bank governors on macroeconomic and financial risks, and the actions required.

In turn, FSB members, subject to FSB elaboration and reporting, commit to (i) pursue the maintenance of financial stability, (ii) enhance the openness and transparency of the financial sector, (3) implement international financial standards, and (4) agree to undergo periodic peer reviews.

As noted in section 4, discussions are on-going with respect to the establishment of a high-level AFSD which would include officials from finance ministries and central banks, and other financial regulators and supervisors. The AFSD would coordinate supervisory and regulatory developments, as well as monitor implementation of more detailed regional standards—in some ways similar to the pre-crisis Lamfalussy process in the EU. Given that Asian economies are generally recovering more quickly than those of Europe and the US, Asia is addressing issues with respect to recovery and potential inflation—both price and asset—that are not shared with all other G20 members and in which regionally coordinated approaches, or at least experience sharing, might be highly valuable.

Significantly, in June 2010, the G20 mandated the FSB to expand upon and formalize its outreach activities beyond the G20 to reflect the global nature of finance,[119] with potentially important implications for both financial sector development initiatives (discussed in Section 7) and regional financial standard development (discussed below).

6.1.2 Tax Havens and Non-Cooperative Jurisdictions

Building on the statement from November 2008, the G20 made strong commitments regarding tax havens in the April 2009 communiqué. The G20 took a very firm line in this context: "The era of banking secrecy is over." With respect to actions, the G20 Financial

[118] Related issues are discussed in section 7.
[119] G20 (2010), p. 20

System Declaration included a toolbox of six measures[120] and, following G20 agreement, the FSB is in the process of establishing a framework of peer reviews.

Regarding tax disclosure and cooperation, the G20 highlighted the publication by the OECD of a list of countries assessed by the OECD's Global Forum on Taxation vis-à-vis international tax information exchange standards.[121] To date, all 17 Asia–Pacific jurisdictions surveyed by the OECD have implemented or committed to implement the OECD's tax transparency and information exchange standards: Australia; Brunei Darussalam; India; Japan; Korea; Malaysia; Marshall Islands; Nauru; New Zealand; Niue; PRC (including Hong Kong, China and Macau, China); Philippines; Samoa; Singapore; and Vanuatu. Of these, six (Brunei Darussalam, Marshall Islands, Nauru, Niue, Philippines, and Vanuatu) have committed to—but not yet substantially implemented—the tax standard. Given the state of development of the Pacific members of this group, it is likely that assistance in meeting the standards would be beneficial, whether provided by ADB or others.

6.1.3 Implementation of International Financial Standards

In 2009, the G20 tasked the FSB and IMF to develop a similar mechanism for international prudential regulatory standards. This indicates that the existing system of international financial standards will be given an effective enforcement mechanism for the first time, based on mechanisms previously used in the context of addressing money laundering and, more recently, tax havens. In addition, the FSB has established an Implementation Monitoring Network.[122]

Most significantly, in January 2010, the FSB released a Framework for Strengthening Adherence to International Standards,[123] following in March by a supporting initiative,[124] building in many ways on previous experiences with the FSAP and tax compliance.

The framework and initiative are designed to (i) examine jurisdictions' compliance against international supervisory and regulatory standards relating to cooperation and information exchange, (ii) examine the reasons for shortcomings in adherence, (iii) discuss the jurisdiction's progress in meeting the relevant recommendations set out in any FSAP, and (iv) make recommendations on steps to improve compliance. The focus is on the core standards of the BCBS, IOSCO, and IAIS. In the context of reviews,

[120] (i) increased disclosure requirements, on the part of taxpayers and financial institutions, to report transactions involving non-cooperative jurisdictions; (ii) withholding taxes for a wide variety of payments; (iii) denying deductions regarding expense payments to payees residing in a non-cooperative jurisdiction; (iv) reviewing tax treaty policy; (v) asking international institutions and regional development banks to review their investment policies; and, (vi) giving extra weight to the principles of tax transparency and information exchange when designing bilateral aid programs.

[121] See OECD (2009).

[122] FSB (2009b), p. 14.

[123] FSB (2010a).

[124] FSB (2010e).

options focus on dialogue and capacity building,[125] market incentives for adherence,[126] and addressing non-cooperative jurisdictions.[127]

These are issues in which the role of an AFSD could be potentially important. Moreover, the establishment of international monitoring arrangements through the FSB and IMF, in addition to extending existing FSAP arrangements, indicates that Asian G20 members will need to focus particularly on G20 and FSB financial regulatory commitments and standards. The FSB however is unlikely to be resourced with significant means to support implementation. As a result, emerging Asian G20 members would benefit from the availability of regional resources to support reform, including mechanisms to benefit from experience and expertise within the region, perhaps through ADB. As highlighted above, areas of concern will be the scope of regulation, identifying gaps in regulation, and designing appropriate regulatory structures and responses. In addition, a range of substantive issues will require attention. These were addressed in sections 3, 4, and 5, and comprise pillars I, II, and III of the G20 financial reform agenda, respectively.

6.2 Implementation of International Standards: Regional Cooperation

Beyond the AFSD, which is still at an early stage of development, Asia has also developed a range of other cooperative mechanisms to support implementation of international financial standards; increase Asia’s voice in international standard-setting fora; and, more recently, to regionalize international standards in certain areas. In this respect, cooperative mechanisms can be divided into three major forms: traditional regional organizations (e.g., ASEAN and APEC); central bank organizations, of which the most successful are EMEAP and SEACEN; and regulatory fora, which to date have largely been regional subgroups of the main international regulatory organizations.

6.2.1 Traditional Regional Institutions and Organizations: ASEAN and APEC

In looking at the main regional organizations, financial norms and standard development have been limited. To date, ASEAN and ASEAN+3 states have been unprepared to relinquish the high degree of national policy control associated with weak regional institutions and organizations. Thus, the extent of regional integration is consistent with shared norms, whether deliberately adopted as is common with the consensual "ASEAN way," the making paramount of other aspects of state policy, or indirectly managed as

[125] In relation to dialogue and capacity building, options include (i) policy dialogue; (ii) technical assistance; (iii) use of MMOUs; (iv) letters to the finance minister; and (v) membership processes, such as conditions on membership of organizations like the FSB.

[126] Market incentives include: (i) raising awareness about standards, (ii) highlighting compliant jurisdictions, (iii) using compliance as a condition for market access, and (iv) developing lists of non-cooperative jurisdictions.

[127] Methodologies for addressing non-compliant jurisdictions include (i) progress reports; (ii) suspension of membership privileges, for example, to the FSB; (iii) advisory letters to financial institutions regarding dealing with non-compliant jurisdictions; (iv) increased regulatory requirements on financial institutions from non-compliant jurisdictions; (v) increased supervisory examination of institutions from and institutions dealing with non-compliant jurisdictions; (vi) increased audit requirements; (vii) higher capital requirements; (viii) restrictions on financial institutions doing business with non-compliant jurisdictions; (ix) restrictions on transactions by international financial institutions such as ADB; and (x) restrictions on cross-border financial transactions involving the non-compliant jurisdiction.

with the participation of commercial and banking interests in governance. The organization of Asian capitalism in the developmental state model has been effective serially in Japan, Korea, and the PRC in this respect, characterized by close directional relationships between the state and leading commercial interests.[128]

The most dramatic result of subsuming regionalism to national policy objectives is seen in the accumulation of international reserves in the region after 2000, partly as a consequence of the primacy of national exchange rate policies over financial integration or regional market development.

In the context of the ASEAN Free Trade Agreement (AFTA), ASEAN's 1995 Framework Agreement on Services (AFAS)[129] seeks to reduce barriers to trade in services, requiring members to negotiate to lift restrictions in specific market segments and—to some degree—expand upon their commitments under the WTO's General Agreement on Trade in Services (GATS). A 2006 assessment of AFAS commissioned by ASEAN and Australia's official Regional Economic Policy Support Facility concluded that its performance was both disappointing and unimpressive.[130] At the same time, given that financial services as well as investment are now included across the ASEAN+3 treaties, this is an area with the potential to support further regional financial integration.

In relation to APEC, in 1998 the APEC Finance Ministers endorsed the establishment of the APEC Financial Regulators Training Initiative to build and enhance staff at financial supervisory and regulatory authorities to promote financial sector stability. This is the longest running initiative endorsed by the finance ministers and currently organizes over 10 regional training programs per year.[131] While APEC was thought to be an effective forum for economic concerns prior to the 1997/98 crisis, since then it has been less successful and the emphasis on governance and resources has shifted to ASEAN+3, WTO, and ASEAN+6 (including India, Australia, and New Zealand). It remains to be seen whether Japanese or US APEC chairmanship will be capable of altering this perception.

6.2.2 Central Bank Organizations

At the international level, the primary international central bank organizations are the IMF, BIS, and various "Gs" (e.g., G7, G10, and G20). Prior to the 1990s, these organizations had limited Asian representation and participation, with Japan being the major exception. While this changed in the 1990s, so did attitudes within the region, especially toward the IMF. Although the IMF has been relatively less successful in providing support for regional central bank communication and cooperation, Asia has developed other organizations such as South East Asia, New Zealand, Australia (SEANZA), the South East Asian Central Banks (SEACEN) Research and Training Centre, and the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP). At least partially in response, the BIS has been working since the 1990s to strengthen its

[128] See especially Redding (1990).
[129] ASEAN (1995), Part. IV. Certain financial sector requirements commitments were strengthened in 2002/03. ASEAN (2003).
[130] Thanh and Bartlett (2006), p. 6.
[131] www.adb.org/Projects/APEC.

role in supporting its Asian membership and increasingly plays a significant supporting role for EMEAP and regional central bank cooperation, as well as regulatory cooperation and standard-setting.

BIS: Bank for International Settlements

Established in 1930 and headquartered in Basel, Switzerland, the BIS is the international organization of central banks. In 1998, the BIS established its first representative office, the Representative Office for Asia and the Pacific (Asian Office) in Hong Kong, China. There are currently 12 Asian members of the BIS.[132] In 2001, the BIS established the BIS Asian Consultative Council (ACC), comprising the 12 Asian BIS member central banks, with the BIS Asian Office providing the Secretariat for the ACC. Thus, the BIS ACC is EMEAP plus India and its membership parallels the largest and/or most developed members of ASEAN/+3/+6. While EMEAP operates separately, it also works closely with the BIS through the Asian Office and the ACC, with the Asian Office increasingly focusing on the needs of the ACC by providing support for regional initiatives such as the various Asian Bond Funds.

SEANZA: South East Asia, New Zealand, and Australia

SEANZA grew out of a 1956 meeting of central bank governors from the British Commonwealth countries in the Asia–Pacific region, in which the governors agreed they should pool resources to provide training courses for staff. There are now 19 members.[133] The main functions of SEANZA are the provision of a (i) biennial central bank training course, (ii) forum for central bank governors, and (iii) forum for banking supervisors.

SEACEN: South East Asian Central Banks

SEACEN was established in 1966, with an informal SEACEN Centre established in 1982. There are now 16 members[134] and 2 observers.[135] Since 2001, training has become the principal activity of the SEACEN Centre with staff from a wide range of central banks in the region participating in training activities.[136] The SEACEN Centre's research activities play a supporting function.

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[132] Australia; Hong Kong, China; India; Indonesia; Japan; Korea; Malaysia; New Zealand; Philippines; PRC; Singapore; and Thailand.

[133] The original members were the central banks of Australia, New Zealand, Pakistan, and Sri Lanka. In addition to the original four, the central banks of a range of Asian economies also now participate. As of 2009, these included Bangladesh; Hong Kong, China; Indonesia; Iran; Japan; Korea; Malaysia; Macau, China; Mongolia; Nepal; Papua New Guinea; Philippines; PRC; Singapore; and Thailand.

[134] The members are Bank Indonesia, Bank Negara Malaysia, Central Bank of Myanmar, Nepal Rastra Bank, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore, Central Bank of Sri Lanka, Bank of Thailand, Bank of Korea (1990), central bank of Taipei,China (Taipei,China) (1992), Bank of Mongolia (1999), Ministry of Finance of Brunei Darussalam (2003), Reserve Bank of Fiji (2004), Bank of Papua New Guinea (2005), National Bank of Cambodia (2006), and State Bank of Viet Nam (2006).

[135] Bank of the Lao PDR and the National Reserve Bank of Tonga are currently observers.

[136] These are Central Bank of Afghanistan, Reserve Bank of Australia, Bangladesh Bank, Royal Monetary Authority of Bhutan, People's Bank of China, Hong Kong Monetary Authority, Reserve Bank of India, Central Bank of the Islamic Republic of Iran, Bank of Japan, Monetary Authority of Macao, Maldives Monetary Authority, Reserve Bank of New Zealand, State Bank of Pakistan, Central Bank of Samoa,

EMEAP: Executives' Meeting of East Asia Pacific Central Banks

EMEAP was established in 1991 as a cooperative organization of central banks and monetary authorities in the East Asia and Pacific Region, with the primary objective of strengthening cooperative relationships among its members. There are currently 11 member central banks from the region.[137] EMEAP focuses on key issues of member concern—monetary and financial stability, financial market development, central bank operations, banking supervision, and IT—as expressed in its various meeting structures.

EMEAP's highest profile activity has been the Asian Bond Fund (ABF) initiative, with the first stage launched in 2003, the second stage launched in 2004, and future directions currently under discussion. In addition to EMEAP, the ABF initiative involves the Reserve Bank of India—thus paralleling the BIS ACC, with support coming from the BIS Asia Office. In addition, EMEAP now co-organizes meetings with the European Central Bank (EMEAP–Eurosystem High Level Seminars)[138] to increase communication and deepen relations between EMEAP and the Eurosystem, with meetings held annually since 2004. EMEAP also coordinates training programs with the Financial Stability Institute and others.

EMEAP plays a significant role in central bank coordination and cooperation amongst its membership, and works closely with ASEAN/+3/+6, ADB, BIS (especially the BIS ACC and Asian Office), and international standard setters. As a result of shared crisis experiences, the effectiveness and impact of the group has grown, with regional initiatives such as the ABF and support for CMIM.

6.2.3 Regulatory Agency Organizations

As noted above, the FSB brings together the main international regulatory organizations. Prior to the global financial crisis, most of these organizations had been increasing their level of regional participation. As a result of G20 commitment, the most significant of these organizations have now expanded membership and governance to include Asian G20 members.

BCBS: Basel Committee on Banking Supervision

The BCBS is the primary international standard setter in the area of banking. Until 2009, it comprised G10 banking supervisors. Following directions from the G20 in 2009, it has now expanded its membership to encompass the G20. Asian members thus include the banking regulators of Australia; Hong Kong, China; India; Indonesia; Japan; Korea; PRC; and Singapore.

Central Bank of the Solomon Islands, Banking of Payment Agency Timor-Leste, and Reserve Bank of Vanuatu.

[137] Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore, and Bank of Thailand.

[138] The Eurosystem comprises the European Central Bank and the national central banks of the euro area.

CPSS and CGFS: Committee on Payment and Settlement Systems and Committee on the Global Financial System

The CPSS is the primary international standard setting organization in the area of payment and settlement systems—a key area of traditional concern in relation to systemic risk, financial integration, and financial development. Until 2009, it comprised G10 central banks but following G20 directions in 2009, its membership now encompasses the G20 and FSB, including the following central banks from Asia: Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Reserve Bank of India, Bank of Japan, Bank of Korea, and Monetary Authority of Singapore.

The CGFS is mandated to seek to identify and assess potential sources of stress in the global financial environment; to further the understanding of the functioning and underpinnings of financial markets and systems; and to promote the development of well-functioning and stable financial markets and systems. Like the CPSS, its membership until 2009 comprised G10 central banks, but has now been extended to parallel that of the CPSS, including its Asian membership.

IOSCO: International Organization of Securities Commissions

IOSCO is the primary international financial standard-setting organization in the area of securities regulation. Unlike the BCBS, its membership prior to the recent global financial crisis was open, with wide Asian participation. Today, 23 Asian securities regulators are IOSCO ordinary members [139] and six Asian agencies are associate (non-voting) members.[140] Finally, there are two Asian affiliate members: the Australian Securities Exchange and ADB. In addition, as a deeper expression of cooperation, IOSCO has developed a self-regulatory mechanism to support information exchange and regulatory cooperation, the IOSCO Multilateral Memorandum of Understanding (MMOU). Significantly, there are a large number of Asian signatories, with 10 Asian regulatory agencies currently parties to the agreement.[141] There are currently an additional five pending Asian applicants.[142]

[139] Australian Securities and Investments Commission, Bangladesh Securities and Exchange Commission, Brunei International Financial Center of the Ministry of Finance, China Securities Regulatory Commission, Hong Kong Securities and Futures Commission, Securities and Exchange Board of India, Indonesian Capital Market and Financial Institutions Supervisory Agency, Financial Services Agency (Japan), Financial Supervision Agency (Kazakhstan), Financial Services Commission/Financial Supervisory Service (Korea), State Agency for Financial Surveillance and Accounting (Kyrgyzstan), Malaysia Securities Commission, Financial Regulatory Commission (Mongolia), New Zealand Securities Commission, Securities and Exchange Commission (Pakistan), Papua New Guinea Securities Commission, Philippines Securities and Exchange Commission, Monetary Authority of Singapore, Sri Lanka Securities and Exchange Commission, Financial Supervisory Commission (Taipei,China), Securities and Exchange Commission (Thailand), Center for Coordination and Control over Functioning of Securities Market (Uzbekistan), and Viet Nam State Securities Commission.

[140] Forward Markets Commission (India), Ministry of Agriculture, Forestry and Fisheries (Japan), Ministry of Economy, Trade and Industry (Japan), Securities and Exchange Surveillance Commission (Japan), Korea Deposit Insurance Commission, Labuan Offshore Financial Services Authority (Malaysia).

[141] Australia Securities and Investments Commission, China Securities Regulatory Commission, Hong Kong Securities and Futures Commission, Securities and Exchange Board of India, Financial Services Agency (Japan), Securities Commission (Malaysia), Securities Commission (New Zealand), Monetary

Through the IOSCO Asia Pacific Regional Committee, ASEAN members have engaged in discussions (with support from ADB) on use of IOSCO standards as the basis for regional standards. In this context and as a first step, the ASEAN Capital Markets Forum (ACMF) has now agreed to regional standards based upon IOSCO standards for equity and debt securities disclosure (the ASEAN and Plus Standards Scheme).[143] The ACMF, established in 2004 and comprising ASEAN capital markets regulators, initially focused on harmonization of rules and regulations (e.g., cross-border offerings of securities through the ASEAN and Plus Standards Scheme). In April 2009, with the endorsement of the ASEAN Capital Markets Integration Plan[144] at the 13th ASEAN Finance Ministers Meeting in April 2009, ACMF's focus was made broader and more strategic.

IAIS: International Association of Insurance Supervisors

The IAIS is the primary international standard-setting organization for insurance regulation. Like IOSCO, its membership is universal, with 27 members from a wide range of Asian jurisdictions, and it has recently developed an MMOU.[145] Unlike IOSCO, however, the IAIS has not yet established a formal regional committee.

In 2000, ASEAN established an ASEAN Insurance Regulators Meeting and an ASEAN Insurance Training and Research Institute (AITRI). AITRI was officially incorporated in 2004, with the Malaysian Insurance Institute in Kuala Lumpur providing the Secretariat. AITRI provides training for regulators and the private sector, conducts research studies, and is supporting the implementation of IAIS standards in ASEAN.

IASB: International Accounting Standards Board

IASB is the primary international standard-setting organization for accounting standards (International Financial Reporting Standards [IFRS]). At present, Australia, PRC (including Hong Kong, China), India, and Japan all have reserved places in the governance framework. Importantly, essentially all of the Asia–Pacific region has or is in the process of adopting IFRS, or is adjusting domestic standards for equivalence.

Authority of Singapore, Securities and Exchange Commission (Sri Lanka), and Securities and Exchange Commission of Thailand.

[142] Indonesian Capital Market Supervisory Agency, Financial Services Commission/Financial Supervisory Service (Korea), Financial Regulatory Commission (Mongolia), Securities and Exchange Commission (Philippines), and Financial Supervisory Commission (Taipei,China).

[143] ACMF (2008a, 2008b).

[144] ACMF (2009).

[145] Australia (Australian Prudential Regulatory Authority, Motor Accidents Authority of New South Wales, Private Health Insurance Administration Council), Bhutan, Cambodia, Taipei,China (Financial Supervisory Commission), Fiji (Reserve Bank of Fiji), Hong Kong, China (Office of the Commissioner of Insurance), India, Japan (Financial Services Agency), Kazakhstan (National Bank of Kazakhstan), Korea (Financial Supervisory Service), Labuan Malaysia (Labuan Offshore Financial Services Authority), Macau, China (Monetary Authority of Macao), Malaysia (Bank Negara Malaysia), Mongolia, Nepal, New Zealand, Pakistan (Securities and Exchange Commission), Papua New Guinea (Department of Finance & Treasury, Bank of Papua New Guinea), Philippines, PRC (China Insurance Regulatory Commission), Samoa, Singapore (Monetary Authority of Singapore), Sri Lanka (Insurance Board of Sri Lanka), Thailand, Uzbekistan, Vanuatu (Vanuatu Financial Services Commission), and Viet Nam.

6.3 Developing Regional Financial Standards

Asian regionalism in the development of financial norms and standards has a limited, albeit expanding, history. In the initial post-war period, the focus was very much on domestic development, with a range of competing models adopted, from central planning and financial allocation to economic laissez-faire, and a range of developmental state models (including administrative direction of financial allocation) gradually emerging as the most successful. In this period, and in the context of the Bretton Woods system restrictions on capital movements and domestically oriented financial systems, there was in fact very limited attention paid to financial standards at the international level or even in the context of Europe. However, there were initial developments in Asia, first with the development of the SEANZA forum from the late 1950s, focusing on central bank communication and cooperation in shared training needs. In addition, with the success of post-war Japanese development, Japan began to increase its profile in international economic and financial organizations, joining the OECD in 1964. At the same time, from the late 1960s, initial movements were made toward increasing an Asian voice in international institutions, with SEACEN and the development of the South East Asia voting group in the IMF and World Bank, and the creation of ADB in 1966.

Following these initial steps, the focus in the 1970s continued to be domestic financial development in the region, increasingly modelled on the Japanese experience and developmental model, including administrative direction of financial allocation. International cooperation in the development of financial norms and standards also remained limited, although it expanded in the 1970s on a largely informal basis. As a result, there was little need or demand for Asian regionalism in this respect. In the wake of the collapse of the Bretton Woods international monetary system and the return of cross-border finance and currency instability, the 1970s witnessed the initial beginnings of a range of transnational regulatory networks, such as the BCBS based at the BIS in the early 1970s, and the establishment of the Library Group (1974), Group of 6 (1975), and G7 (1976), all of which included Japan.

In the 1980s and 1990s, as capital movements were increasingly liberalized and finance globalized, international cooperation in the development of financial norms and standards increased, largely on the basis of transnational networks. During this period, Asian countries increased participation in related international institutions, largely adopting the consensus supporting financial liberalization and seeking to learn from Western experience, without any desire or move towards leadership but while also recognizing the increasing value of communication on regional issues with the establishment of EMEAP in 1991. With the 1997/98 Asian financial crisis came the first major impetus for Asian regionalism in supporting regional financial stability and regionalizing international cooperation and coordination.

Following the Asian financial crisis, in the area of finance, East Asian countries felt the need for alternatives to international mechanisms such as the IMF. Since the crisis, cooperation in relation to financial norms and standards through EMEAP, ASEAN/ASEAN+3, and ADB has increased dramatically. At the same time, the regional consensus shifted away from financial liberalization and towards export-led growth and reserve accumulation in the context of monetary and financial stability domestically, regionally, and internationally. Efforts during this period focused on bond market development through the Asian Bond Market Initiative (ABMI), alternative liquidity

arrangements through CMI, and initial steps towards regionalization of international financial norms and standards.

At the international level, following the 1997/98 Asian financial crisis, transnational networks addressing international financial norms and standards were institutionalized through the FSF, G20 (operating at Finance Minister and Central Bank Governor level until 2008), and the IMF–World Bank FSAP. It was during this period as well that international institutions such as the BIS and IOSCO began to court Asian participation, in some cases in direct competition with regional institutions such as EMEAP, with the BIS establishing its first regional office in Hong Kong, China in 1998. At the same time, East Asia's participation in the FSAP has been more limited than that of other regions, reflecting to some extent a continuing distrust of the IMF and also increasing support for more regionally tailored approaches. Finally, it was also during this period that Asia's first international financial norm and standard-setting organization was established, the Islamic Financial Services Board (IFSB) in 2002 in Kuala Lumpur, and that ASEAN agreed to regional limited liberalization of financial services (with the development of the financial provisions of the AFAS) and developed the first regional versions of international financial standards (with the ASEAN and Plus Standards Scheme in 2008).

In the wake of the global financial crisis of 2007–10, new impetus has developed for Asian regionalism in the development of financial norms and standards. At the international level, Asian participation is being courted with the expansion of the G20 to heads of government meetings (with Korea hosting in 2010) and the restructuring of the FSF into the FSB, including expansion of membership and governance to parallel the G20 not only in the FSB but also across the major international financial regulatory organizations (BCBS, IOSCO, IAIS, and IASB). Within the region, countries are working to establish an AFSD and also looking toward regional arrangements to support monetary and financial stability, such as an Asian currency and/or Asian Monetary Fund (AMF), building upon CMIM.

Today, international financial norm and standard development takes place mainly through the G20 (overall policy) and the FSB and BIS (coordinating international standard-setting organizations such as the BCBS), with domestic implementation supported by the World Bank and ADB, among others, and regional implementation in the EU (and increasingly ASEAN) and monitoring conducted through the FSB and IMF. At the same time, trade in financial services operates in parallel through the WTO, as well as regionally in the EU and to a more limited extent in ASEAN/+3/+6.

In Asia, the ASEAN/+3/+6 Finance Ministers process plays a policy-setting role—to some extent—through the CMIM process (ASEAN+3) and most recently with ASEAN's adoption of a capital market integration plan in 2009. Regional financial and monetary policy cooperation also takes place through EMEAP and the BIS ACC, with support from the BIS. Standards have largely been taken from the international process, but with increasing moves to develop regionally tailored equivalents through regional groups of international organizations, such as IOSCO, and increasingly through ASEAN. At the same time, there have been initial steps to develop an AFSD to coordinate regional cooperation, coordination, and standard development. Implementation of international standards is widespread in the region, but willingness to participate in international monitoring through the IMF is limited, albeit likely to increase as a result of G20

commitments to FSAP participation.[146] Likewise, regional trade in financial services liberalization is limited but with the potential to increase. As a result of the global financial crisis, there is the potential for regionalism at all levels of financial norm and standard development to increase, not only in the context of ASEAN/+3/+6, but also more widely, in order to support financial stability and development.

Regional financial cooperation and integration in Asia has reached a point where further development can best be obtained through deepening institutionalization towards more formal, rules-based regional arrangements. In this context, the overriding objectives across the region continue to be (i) economic growth and development; and (ii) social, economic, financial, and political stability. These are twin objectives which sometimes conflict but which also indicate potential avenues for formalizing regional arrangements relating to finance.

7. Financial Sector Development: Supporting Growth and Addressing Imbalances

For Asia, perhaps more so than in relation to financial regulation, the key lesson of the recent crisis has been the need to further develop and rebalance domestic economies, broaden trade and investment sources and destinations, and enhance domestic and regional financial systems.

7.1 The G20, Global Imbalances, and Financial Sector Development

Not surprisingly, to date, the G20 has focused much more on economic and financial stability rather than on financial sector development. In their April 2009 communiqué, leaders committed to "build a stronger, more globally consistent, supervisory and regulatory framework for the future financial sector, which will support sustainable global growth". However, attention paid to the role of finance in supporting sustainable global growth was limited, with finance to support growth not even included within the overall reform objectives or in assigned regulatory objectives except to the extent that regulators were tasked to "support competition and dynamism". Significantly, while the FSB has not been given a specific mandate to address financial sector development, in June 2010, it was mandated to expand and formalize its outreach activities globally.[147]

In April 2009, G20 leaders committed "not only to restore growth but to lay the foundation for a fair and sustainable world economy."[148] In this context, they reaffirmed their commitment to meeting the Millennium Development Goals and achieving existing aid commitments. Financial commitments did extend to development and growth considerations, with a headline figure of US$850 billion, including support for a 200% ADB capital increase to "support growth in emerging market and developing countries by helping to finance counter-cyclical spending, bank recapitalization, infrastructure, trade

[146] FSAPs in the Asia–Pacific have so far been completed for Australia (2006); Hong Kong, China (2003); Japan (2003); Kazakhstan (2004); Korea (2003); Kyrgyz Republic (2003); Mongolia (2008); Pakistan (2004); Singapore (2004); Sri Lanka (2007); Tajikistan (2008); and Thailand (2009).

[147] G20 (2010).

[148] G20 (2009c).

finance, balance of payments support, and social support."[149] In addition, leaders committed to developing a charter for sustainable economic activity, based on a "new global consensus on the key values and principles that will promote sustainable economic activity".[150] Leaders also committed to the completion of the Doha development round of trade negotiations and United Nations (UN) climate change negotiations.

In their September 2009 Pittsburgh communiqué, G20 leaders focused on maintaining economic stimulus and working to meet existing commitments. At the same time, unlike previous statements, leaders looked explicitly forward, pledging "to adopt the policies needed to lay the foundation for strong, sustained, and balanced growth", including "growth without cycles of boom and bust and markets that foster responsibility not recklessness."[151] In so doing, the G20 committed to (i) launch a framework that lays out policies and cooperation to generate strong, sustainable, and balanced global growth; (ii) address regulatory issues; (iii) reform the global economic and financial architecture; (iv) take new steps to increase access to food, fuel, and finance among the world's poorest while clamping down on illicit outflows; (v) phase out and rationalize over the medium-term inefficient fossil fuel subsidies while providing targeted support for the poorest; and (vi) maintain openness and move toward greener, more sustainable growth.

In relation to sustainable growth, leaders agreed upon the need to establish a pattern of more sustainable and balanced growth across countries, and to reduce development imbalances. In this context, leaders agreed that "[e]nsuring a strong recovery will necessitate adjustments across different parts of the global economy," including macroeconomic policies that promote adequate and balanced global demand, and "decisive progress" on structural reforms to foster domestic demand, narrow development gaps, and strengthen long-run growth potential.[152]

In this respect, leaders launched a new Framework for Strong, Sustainable, and Balanced Growth, based on agreed Core Values for Sustainable Economic Activity, which significantly includes two principles addressing financial sector development[153] among its eight principles.[154] The framework is to include: (i) fiscal, monetary, trade, and

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[149] Ibid.

[150] Ibid.

[151] G20 (2009f).

[152] Ibid.

[153] According to the third principle, leaders have a responsibility to ensure, through appropriate rules and incentives, that financial and other markets function based on propriety, integrity, and transparency, and to encourage businesses to support the efficient allocation of resources for sustainable economic performance. According to the fourth principle, leaders have the responsibility to provide financial markets that serve the needs of households, businesses, and productive investment by strengthening oversight, transparency, and accountability.

[154] Under the first principle, leaders have a responsibility to ensure sound macroeconomic policies that serve long-term economic objectives and help avoid unsustainable global imbalances. Under the second, leaders have responsibility to reject protectionism in all its form, support open markets, foster fair and transparent competition, and promote entrepreneurship and innovation across countries. Under the fifth principle, leaders have responsibility to secure the future through sustainable consumption, production, and use of resources in a manner that conserves the environment and addresses the challenge of climate change. Under the sixth, leaders have responsibility to invest in

structural policies collectively consistent with sustainable and balanced growth; (ii) a sustainable growth model to take into account social and environmental dimensions of economic development; and (iii) a process of mutual assessment among G20 members, based on shared policy objectives supported by medium-term policy frameworks, with primary responsibility assigned to the IMF and G20 finance ministers and central bank governors.[155] From the standpoint of financial sector development and addressing global imbalances, the framework includes two commitments: (i) G20 members with sustained, significant external deficits pledged to undertake policies to support private savings and undertake fiscal consolidation, while maintaining open markets and strengthening export sectors; and (ii) G20 members with sustained, significant external surpluses pledged to strengthen domestic sources of growth, including (depending on circumstances) increasing investment, reducing financial market distortions, boosting productivity in service sectors, improving social safety nets, and lifting constraints on demand growth.

In addition, in the context of strengthening support for the most vulnerable, G20 leaders made specific commitments relating to financial sector development, with the establishment of a G20 Financial Inclusion Group—comprising the Consultative Group to Assist the Poor (CGAP) and the International Finance Corporation (IFC), among others—tasked to identify lessons learned in providing finance to the poor, promote regulatory and policy approaches, and establish standards on financial access, literacy, and consumer protection. In this context, as a significant initial step, the BCBS in February 2010 released principles related to microfinance for consultation.[156] In addition, the Financial Inclusion Group has released principles for innovative financial inclusion.

In June 2010, G20 leaders announced it was their "highest priority" to safeguard and strengthen economic recovery and "lay the foundations for strong, sustainable, and balanced growth."[157] On the basis of initial mutual assessments and reports by the IMF and World Bank,[158] the G20 committed to a series of concerted actions that would be differentiated and tailored to national circumstances: (i) establish sound fiscal finances "to sustain recovery, provide flexibility to respond to new shocks, ensure the capacity to meet the challenging of aging populations, and avoid leaving future generations with a legacy of deficits and debts"; (ii) strengthen social safety nets, enhancing corporate governance reform, financial market development, infrastructure spending, and greater

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people by providing education, job training, decent work conditions, health care, and social safety net support; and to fight poverty, discrimination, and all forms of social exclusion. Under the seventh, leaders have responsibility to recognize that all economies are partners in building a sustainable and balanced global economy in which the benefits of economic growth are broadly and equitably shared, including achievement of internationally agreed development goals. Finally, leaders have responsibility to ensure an international economic and financial architecture that reflects changes in the world economy and the new challenges of globalization.

[155] Specifically, the framework is to include: (i) implement responsible fiscal policies; (ii) strengthen financial supervision; (iii) promote more balanced current accounts and support open trade and investment; (iv) pursue monetary policies consistent with price stability in the context of market oriented exchange rates that reflect underlying economic fundamentals; (v) implement structural reforms to increase potential growth rates and, where needed, improve social safety nets; and (vi) promote balanced and sustainable economic growth in order to narrow development imbalances and reduce poverty.

[156] BCBS (2010a).

[157] G20 (2010), p. 2.

[158] IMF (2010b); World Bank (2010).

exchange rate flexibility in emerging markets; (iii) pursue structural reforms across the entire G20 membership to increase and sustain growth prospects; and (iv) make more progress on rebalancing global demand.[159]

While financial sector development concerns were not central to the crisis, except to the extent of excessive financialization in certain markets, issues with respect to global imbalances were significant factors in the pre-crisis build-up of excesses and these relate directly to financial sector development, especially in Asia.

7.2 Imbalances in the Role of Finance in Asia's Pre-crisis Growth Model

The economic successes in Asia have—to a certain extent—masked structural problems in Asia's model of economic development.[160] These structural problems mainly include focus on weaknesses in financial intermediation and its capacity to support balanced sustainable growth Such structural problems, if not dealt with carefully, will undermine the building blocks of Asia's growth model. Perhaps more significantly, the global financial crisis has undermined one of the central features of the Asian growth model: its historic dependence on exports to developed Western markets.

Transnational financial activity has been important in Asia for generations, first in domestic or colonial direct investment, and in trade finance provided by commercial banks; and in the period of the post-1960s Asian economic miracle, as a result of a strong export-orientation and relatively open borders for capital flows. The character of today's Asian financial markets is heavily influenced by inflows from overseas, outward portfolio investment, the presence of non-Asian intermediaries and investors, and the influence of financial innovation imported—sometimes with modifications to account for local conditions—from New York and London.

The Asian model of development has enabled a succession of Asian economies to unleash rapid growth. The model, however, does not come without costs. The success and sustainability of this model largely hinges on a number of assumptions. First, there exists an effective system of financial intermediation, which continuously channels capital (savings and investment) to the most wanted and most profitable sectors in an economy. Weaknesses in this respect were brought dramatically to light during the 1997/98 Asian financial crisis. Likewise, in the context of the Great Moderation, Asian savings surpluses have tended to be exported to Western financial centers, providing fuel for global asset inflation. Second, reliance on foreign markets, especially the US and the EU, has been a driver—in some cases, the driver—of economic development. This model provided the engine for growth before and after the Asian financial crisis; however, in the wake of the global financial crisis, it is now clear that exports and demand must be more balanced domestically, regionally, and internationally. Third, high levels of savings will continue in Asia, and Asia will continue to provide a large number of low-cost workers. To date, high savings and the availability of low-cost workers continue; however, there is now a clear need and consensus to increase consumption in major economies in the region and to redirect savings toward domestic and regional development. Fourth, the particular approach to macroeconomic and structural policies

[159] G20 (2010), p. 2-3 and 10-14.

[160] For detailed discussion, see Liu, Arner, and Lejot (Forthcoming).

that has been adopted by Asian governments can deliver high growth along with a reasonable degree of macroeconomic stability. At the same time, the costs and welfare loss associated with the accumulation of foreign reserves in Asia can be managed at a sustainable level. Reserve accumulation and their use are the focus of continuing domestic and regional attention, especially through CMIM and ABMI. Finally, regional competition, especially competition for cheaper factor inputs (e.g., labor), will not generate imbalances and become a source of instability. While imbalances to date have mainly been considered at the international level, there are increasing concerns about regional imbalances, which is an issue of medium-term concern.

The global financial crisis has raised questions with respect to each of these conditions and, as agreed upon by the G20, highlighted the importance of financial sector development in the region as part of a global process of balanced growth.

7.3 Financial Sector Development

Overall, one aspect of finance which the global financial crisis has not changed is the fact that finance remains central to growth and development, albeit with potentially high periodic costs.[161] Experience and research demonstrate that an appropriately designed institutional framework for finance is necessary to achieve the twin objectives of supporting economic growth and financial stability.[162] First, a reliable institutional framework is essential to provide the rules of the game for financial transactions and to support financial sector development. Without an appropriate legal and institutional framework, effective finance will not develop. Across Asia, financial sector development remains an important objective. In fact, in the wake of the global financial crisis and the consensus to support more balanced and sustainable global growth, further domestic and regional financial development in Asia is now essential. Second, weak financial sectors have been a significant cause of many financial crises, including the 1997/98 Asian financial crisis and the global financial crisis. An appropriately designed legal and regulatory framework is necessary to strengthen financial intermediaries and to help prevent the occurrence of crises. To date, these issues have been the primary focus of the G20 and have been addressed in preceding sections. Third, as discussed in section 6, in the context of financial distress or crisis, an effective framework supports

[161] For detailed analysis, see Arner (2007).

[162] Schinasi provides the most comprehensive definition of financial stability: Financial stability is a situation in which the financial system is capable of satisfactorily performing its three key functions simultaneously. First, the financial system is efficiently and smoothly facilitating the intertemporal allocation of resources from savers to investors and the allocation of economic resources generally. Second, forward-looking financial risks are being assessed and priced reasonably accurately and are being relatively well-managed. Third, the financial system is in such condition that it can comfortably if not smoothly absorb financial and real economic surprises and shocks.

Schinasi (2006), p. 82. This definition implies that the objective is maintaining the smooth functioning of the financial system and maintaining the system's ability to facilitate and support the efficient functioning and performance of the economy, and having in place the mechanisms to prevent financial problems from becoming systemic or from threatening the stability of the financial and economic system, but without undermining the economy's ability to sustain growth and perform its other important functions.

Ibid., p. 100. Schinasi's definition thus extends beyond crisis prevention and addressing systemic risk to support for financial development (and thereby, directly or indirectly, economic growth).

the resolution of difficulties. In the absence of such a framework, crisis resolution becomes much more difficult, time-consuming, and expensive.

This institutional framework for finance has two main elements: the foundations of financial sector development, and financial regulation and supervision. The institutional foundations of financial stability and development comprise three principal aspects:[163] the preconditions for finance,[164] macroeconomic and monetary policy,[165] and financial infrastructure.[166] Three principal elements of the institutional framework for financial regulation and supervision can be identified: first, a competitive market-based financial system; second, a well-designed financial regulatory and supervisory system, including effective regulators with clearly defined objectives and roles; third, mechanisms to address financial problems when they arise.[167] In achieving these elements, the regulatory system should be designed to achieve certain objectives: financial stability, prudential supervision, consumer and market integrity protection, and competition.

Against this set of criteria, in each case, recent events have highlighted weaknesses in the design of the financial regulatory systems around the world. Against the twin objectives of growth and stability, the proposals to date are in many ways important but are not sufficient to put in place an institutional framework to support economic growth.

Across Asia, there is a clear need to focus efforts on financial sector development to support growth and rebalancing. In this context, efforts should focus first on the foundations of finance and financial infrastructure, especially effective payment systems, clear and transparent property rights, information infrastructure, and corporate governance arrangements, including insolvency arrangements, and dispute resolution systems. In the context of financial regulatory systems and development, significantly, the BCBS, IOSCO, and IAIS are now all revising their respective core principles, with a greater focus on preconditions. Across much of the region, these preconditions (foundations and infrastructure) remain a central focus for development. In the context of

[163] See Arner (2007), chs. 3–5.

[164] The preconditions for finance are the fundamental elements necessary for finance to develop and function, namely which may be termed foundations of financial development and economic growth, and institutional underpinnings of finance. Financial systems require certain legal and institutional elements to be in place in order to function. These include property rights, collateral frameworks and company law, which, in turn, must be set in a framework supporting effective governance providing for enforcement of contracts and commercial dispute resolution. Arner (2007), ch. 3.

[165] Financial sector development occurs best and stability is most likely to be maintained in the context of a stable macroeconomic setting, including appropriate monetary, financial and fiscal policies and frameworks. Arner (2007), ch. 4.

[166] Certain elements of institutional and market infrastructure are essential to support the development of an effective financial system. These elements build upon the institutional underpinnings operating in the context of macroeconomic stability and are necessary for the financial regulatory systems and structures to function properly in a market economy. These sorts of legal infrastructure necessary for financial systems to function properly include payment and settlement systems, government bond markets, insolvency regimes, corporate governance, and accounting and auditing systems ("financial information"). These are supported by appropriate measures to protect market integrity and thus confidence in the financial system. It is only when both the foundations and the supporting infrastructure are in place that financial market liberalization, regulation, and supervision can function properly. Arner (2007), chs. 4–5.

[167] See Arner (2007), chs. 6–10.

banking, banking systems need to extend their reach to a broader portion of the population, especially SMEs, including through continued development of microfinance markets. In the context of securities markets, infrastructure, transparency, and corporate governance are central to development (as well as stability), not only in equity markets but also in debt markets. In insurance, major opportunities are presented for development of pensions and contractual savings arrangements to support use of financial resources in the region and also to underlie social safety nets across the region necessary to support increased consumption.

7.4 Principles for Innovative Financial Inclusion

The G20 principles for innovative financial inclusion, released in June 2010, address nine areas: (i) leadership,[168] (ii) diversity,[169] (iii) innovation,[170] (iv) protection,[171] (v) empowerment,[172] (vi) cooperation,[173] (vii) knowledge,[174] (viii) proportionality,[175] and (ix) framework.[176] Overall, these principles aim to provide guidance in establishing an enabling environment for innovative financial inclusion, aimed at closing the financial services access gap for over 2 billion people around the world. As such, they provide a clear frame of reference for developing countries in the region, as well as ADB, in seeking to build inclusive growth supporting financial development.

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[168] There should be a broad-based government commitment to financial inclusion to help alleviate poverty.

[169] Policy approaches should be implemented that promote competition and provide market-based incentives for delivery of sustainable financial access and usage of a broad range of affordable services (e.g., savings, credit, payments and transfers, insurance), as well as diversity of service providers.

[170] Technological and institutional innovation should be promoted as a means to expand financial system access and usage, including by addressing infrastructure weaknesses.

[171] A comprehensive approach to consumer protection should be encouraged that recognizes the roles of government, business, and other stakeholders.

[172] Financial literacy and financial capability should be developed.

[173] An institutional environment should be created with clear lines of accountability and coordination within government that encourages partnerships and direct consultation across government, business, and other stakeholders.

[174] Improved data should be used to make evidence-based policy, measure progress, and consider an incremental "test-and-learn" approach acceptable to both regulator and service provider.

[175] A policy and regulatory framework should be built that is proportionate with the risks and benefits involved in such innovative products and services, and is based on an understanding of the gaps and barriers in exiting regulation.

[176] The following should be considered in the regulatory framework, reflecting international standards, national circumstances, and support for a competitive landscape: (i) an appropriate, flexible, risk-based anti-money laundering and countering the financing of terrorism (AML-CFT) regime; (ii) conditions for the use of agents as a customer interface; (iii) a clear regulatory regime for electronically stored value; and (iv) market-based incentives to achieve the long-term goal of broad interoperability and interconnection.

8. International and Regional Financial Architecture

Beyond questions of financial regulation and financial development, the global financial crisis has raised the question of whether there is a need to reform or redesign the international financial architecture. On balance, the arrangements put in place following the 1997/98 Asian financial crisis were neither effective in preventing a global systemic financial crisis nor (with the possible exception of the G20) effective in dealing with such a global systemic crisis when it actually occurred. At the very least, the fundamental features underlying the original post-war design—open trade, fixed exchange rates, domestically oriented finance, and coordinated development assistance—no longer exist, with the exception of liberal trade. Today, the global economy is one of a largely open trading system, generally floating exchange rates, globalized finance, and decentralized support for development. As demonstrated by the global financial crisis, the global financial system remains prone to periodic instability and crises.

8.1 The G20 and the International Financial Architecture

While most of the focus of the November 2008 G20 meeting was on economic coordination and regulatory responses, under their fifth principle, the G20 committed "to advancing the reform of the Bretton Woods Institutions so that they can more adequately reflect changing economic weights in the world economy."[177] In this respect, the G20 Action Plan mandated six immediate actions and three medium term actions.[178]

The first immediate action directed the FSF to broaden its emerging economy membership, resulting in the inclusion of members of the G20 which were not previously FSF members—Brazil, PRC, India, Russia, and Turkey.[179] Other major standard-setting bodies, including the BCBS and IOSCO, have now modified their membership and/or governance structures to varying extents.[180] The second immediate action item delineated responsibilities, with the IMF focusing on surveillance and the FSF focusing on standard-setting, and mandates increased cooperation between the IMF and FSF, especially in integrating regulatory and supervisory processes into the macroprudential framework and conducting early warning exercises. The third directed the IMF to take a leading role in drawing lessons from the crisis, in close coordination with the FSF and others. The fourth committed to a review of the adequacy of resources of the IMF, the World Bank Group and other MDBs, with increases as necessary. At the same time, these institutions were directed to review and adapt their lending instruments to meet members' needs, and to revise their lending roles in light of the crisis. The fifth was an agreement to explore ways to restore emerging market and developing country access to finance in the context of the crisis, including private capital flows. Finally, MDBs were

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177 G20 (2008), p. 3.

178 See G20 (2008), p. 5.

179 FSF (2009a).

180 The BCBS extended its membership to include Argentina; Indonesia; Saudi Arabia; South Africa; Turkey; Hong Kong, China; and Singapore. BCBS (June 2009a). IOSCO invited the securities regulatory authorities from Brazil, PRC, and India to become members of the Technical Committee. IOSCO (2009h). The IAIS did not broaden its membership after the G20 declaration—the last new member was the European Commission in April 2008—but there has been an increased emphasis on group-wide supervision and macroprudential regulation, in line with the dictates of the G20. IAIS (2009).

directed to put in place arrangements to support countries with good records and sound policies.

The medium-term actions are more ambitious. First, the G20 committed to comprehensive reform of the Bretton Woods institutions so that they can more adequately reflect changing economic influence in the world economy and be more responsive to future challenges, with emerging and developing economies to be given greater voice and representation. Second, the IMF was directed to conduct vigorous and even-handed surveillance reviews of all countries as well as giving greater attention to their financial sectors, including improving integration of the FSAP, all in support of providing improved macrofinancial policy advice. Third, the advanced economies and the IMF committed to providing necessary capacity building programs for emerging market and developing economies to support implementation of international regulatory standards.

In their April 2009 statement, G20 leaders built significantly on these initial commitments. In relation to strengthening global financial institutions, the G20 provided details of their headline US$850 billion funding commitments, with additional details provided in a second annex, the International Financial Institutions (IFI) Declaration.[181] Essentially, this breaks down into US$750 billion for the IMF through an additional US$250 billion Special Drawing rights (SDR) allocation, by expanding the New Arrangements to Borrow (NAB) by US$500 billion, and by considering "market borrowing if necessary."[182] The IFI Declaration supplements this with a commitment to doubling the IMF's concessional lending capacity and access limits, funded by gold sales.[183] The remaining US$100 billion comes from capital increases for the multilateral development banks (MDBs).[184] In addition, the IMF was directed to implement a new Flexible Credit Line (FCL),[185] and to reform lending and conditionality "to ensure that its facilities address effectively the underlying causes of countries' balance of payments financing needs, particularly the withdrawal of external capital flows."[186] The IFI Declaration expands this to include support for certain World Bank and International Development Assistance (IDA) funds.[187]

As a second element, the April 2009 G20 statement addressed issues relating to the relevance, effectiveness, and legitimacy of the IMF and MDBs. Specifically, the mandates, scope, and governance of these entities are to be reviewed and reformed "to reflect changes in the world economy and the new challenges of globalization."[188] Better

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[181] G20 (2009d).

[182] G20 (2009c), paras. 17 and 19, including ratification of the Fourth Amendment to the IMF Articles.

[183] G20 (2009d), p. 1.

[184] G20 (2009c), para. 17. This is elaborated to include "full and exceptional use of MDB balance sheets" for lending; a 200% capital increase for the ADB and capital reviews for the AfDB, IADB, and EBRD; actions by MDBs "to leverage private capital more effectively"; and support for a new International Finance Corporation (IFC) Global Trade Liquidity Pool of US$50 billion to support US$250 billion of trade finance and other MDB trade finance facilitation efforts. G20 (2009d), p. 2.

[185] To date, three countries, Poland, Mexico, and Colombia, have accessed the Flexible Credit Line.

[186] G20 (2009c), para. 18.

[187] G20 (2009d), p. 2.

[188] G20 (2009c), para. 20.

strategic oversight and decision making are mandated to enhance credibility and accountability.[189]

In support of these objectives, the leaders committed to (i) implementing IMF quota and voice reforms agreed to in April 2008, with the IMF to complete the next review of quotas by January 2011; (ii) giving consideration to greater involvement of the Fund's Governors in providing strategic direction to the IMF and increasing its accountability; (iii) implementing World Bank reforms agreed to in October 2008, with further recommendations to be agreed to in 2010; (iv) heads and senior leadership of the IFIs to be appointed through an open, transparent, and merit-based selection process; and (v) building on the current reviews of the IMF and World Bank, consulting widely in an inclusive process and reporting back with proposals for further reforms to improve the responsiveness and adaptability of the IFIs.[190]

At Pittsburgh in September 2009, G20 leaders reaffirmed their earlier commitments and extended them in one significant respect: the G20 designated itself as the "premier forum" for international economic cooperation, but did not extensively address reform of the international financial architecture beyond reaffirming previous commitments. In June 2010, the G20 committed once more "to strengthening the legitimacy, credibility, and effectiveness of the IFIs" and outlined progress on capital increases and other previous commitments.[191] Importantly, the G20 tasked finance ministers and central bank governors "to prepare policy options to strengthen global financial safety nets" with the goal of building a more stable and resilient international monetary system, addressing capital flow volatility, financial fragility, crisis contagion, and the role of the IMF.[192]

As a result, it appears likely that discussions relating to reform of the international financial architecture will be a key theme of the Seoul summit in November 2010. Specifically, in relation to MDB reforms to enhance effectiveness, efficiency, and accountability, the G20 outlined a number of ongoing reform commitments to build "not just bigger MDBs, but better MDBs, with more strategic focus on lifting the lives of the poor, underwriting growth, promoting security, and addressing the global challenges of climate change and food security."[193] These include (i) commitments to further support the poorest countries in a financially prudent way, including by transferring resources, where feasible, from MDB net income to their respective lending facilities for low-income countries and increasing their investment activities in low-income countries and frontier regions; (ii) specific actions for greater transparency, stronger accountability, improved institutional governance, deeper country ownership, more decentralization and use of country systems where appropriate, enhanced procurement guidelines, new ways of managing and tracking results and financial contributions, and a range of internal administrative reforms; (iii) deeper support for private sector development as a vital component of sustainable and inclusive development; and (iv) recommitting to their core

[189] Ibid.

[190] Ibid.

[191] G20 (2010), p. 5–6 and 22–27.

[192] Ibid., p. 6.

[193] Ibid., p. 23–24.

development mandates and taking up a greater role in the provision of global solutions to transnational problems, such as climate change and food security.

8.2 Enhancing the International Financial Architecture

If the objective of the international financial architecture is a framework to support sustainable global development based upon liberal trade and global finance, the current framework, while largely effective in supporting trade liberalization (through the WTO and ever-increasing regional arrangements, including across Asia and especially throughout ASEAN/+3/+6), has not been effective in supporting financial stability. At the international level, a range of proposals have been made to address related issues.

Serious proposals have been put forward by the UN through the Stiglitz Commission and the PRC, among others. Key issues identified include, first, the need for rebalancing of the global economy, focusing on the relationship between the US, PRC, and East Asia. Second, economies and international organizations must strengthen and intensify regulation of international speculative capital flows, including reinforcing regulation, enhancing transparency, developing EWS and other preventive measures for developing economies, increasing aid, and providing mechanisms to address temporary balance of payments problems that are swift and with limited conditionality. Third, there must be appropriate measures to channel more savings into developing and emerging economies, and to redirect savings to such markets as the future growth engines of the world economy. Fourth, reform of the international monetary system must be considered.

Overall, these recommendations need to be seriously considered, as global imbalances played an important role in the pre-crisis build-up and currency instability remains a continuing concern in Asia. In achieving these objectives, focus should be placed on the aspects which have proven necessary in the context of the global economy. First, there is a clear need for some sort of mechanism to support economic cooperation and coordination, the role now being filled by the G20. Second, trade arrangements are at the heart of the design, with special needs for financial liberalization and cross-border provision of services. Third, there is a need for some system of macroeconomic policy standard-setting and monitoring, which is to some extent the role that the IMF plays through its surveillance activities. This would include monetary arrangements. Fourth, if finance is to remain globalized, there is a clear necessity for appropriate financial stability and development arrangements to both prevent financial crises and resolve those crises which do occur, at the sovereign level and at the level of global financial institutions and markets. Fifth, sustainable development is now no longer just a domestic issue but one with global implications—positive and negative.

In looking at these issues, from the overall objective and specific needs, the discussion turns to questions of organization and allocation of responsibilities, mandates, and powers, and only then to questions of the design of individual organizations, including membership, governance, funding, independence, and accountability.

8.2.1 Coordination

The need for international economic cooperation and coordination has been clearly demonstrated by the variety of arrangements which have been attempted—League of

Nations, BIS, UN, OECD, Comecon, European Economic Community, the various "Gs", and most recently the G20. At the most basic level, it is clearly significant for heads of government and senior economic officials to meet periodically on a multilateral basis in order to discuss common issues and concerns which are probably an unavoidable element of a global economy. However, immediately issues of inclusiveness and exclusiveness arise: who should be there and who should not in order to have the most effective discussion? These are issues that have been at the center of recent discussions in Asia, with ASEAN+3 emerging as the most developed mechanism to date.

On balance, though perhaps a bit unwieldy, the G20 has during the current crisis emerged as a relatively effective forum for cooperation and coordination. A similar group (of 16) has also been active in climate and trade negotiations. The general view amongst members is that the G20 is both useful and appropriate, and probably does not require any greater level of formality than has previously been the case, albeit with the probable exception of the need for some sort of formal secretariat to provide support.

For Asia, the question is how to achieve a common voice in the G20, in order to balance the US and EU. In this context, ASEAN+3 and ASEAN+6 could provide such a mechanism, with the AFSD playing a similar role in the context of the FSB.

8.2.2 Trade

Overall, the WTO has not played an overly significant role during the global financial crisis. However, it has arguably played an important role in providing an outlet for disputes arising from the crisis-inspired protectionist inclinations of a range of countries around the world. In addition, in the wake of the global crisis, the WTO has been the focus of increasing attention in relation not only to traditional trade-related disputes, but also to other issues such as currency valuations. At the same time, the April G20 directive to the WTO to engage in third-party monitoring of protectionist measures is a potentially significant development for the organization and its role in the global economy. At the least, it is indicative of general support for continued global trade. Nonetheless, the Doha round remains largely stalled, as a result of the crisis and attentions being directed to other issues such as food, energy, and climate change.

In addition, while support continues for liberalization of trade in goods, issues respecting investment, competition, and financial services have largely been abandoned, with interest in these issues in all likelihood suffering as a result of the crisis. In respect of financial services, the crisis likely means that there will be very limited support for further liberalization in the near future. This provides the possibility of advancing related issues in the regional context, especially relating to investment and financial services liberalization.

8.2.3 Macroeconomic and Monetary Policy

In a global economy and especially one with a global financial system, problems in one economy can quickly spread to another, whether or not similarly situated. This was a clear lesson of crises in the 1980s, 1990s, and today, most recently in the context of Greece. As a result, self-protection indicates the need for some sort of mechanism for monitoring the macroeconomic stability of countries. While this could be done at the

bilateral level (and is in some cases), efficiency arguments would suggest the use of centralization of this sort of function—perhaps at the regional as well as global level. Such monitoring includes transparency at the sovereign level (one area in which changes following the 1997/98 Asian financial crisis have been largely effective) as well as issues relating to fiscal policy and monetary policy.

In the context of macroeconomic policy, the IMF has arguably been rather effective in terms of both enhancing transparency and in providing external monitoring through its data, research, and surveillance functions. As such, there is a strong argument for building upon its effectiveness in these areas. At the same time, it has been much less effective in the context of financial stability, which has not been part of its central mandate, and development, where its structural adjustment policies and approaches have been subject to much criticism. In this context, discussions are underway on reforming the IMF's mandate—an important opportunity to clarify and focus its role and resources to more closely match the needs of today's global economy and financial systems.

This crisis has brought back to light questions regarding international currency arrangements which have largely been dormant since the 1970s and the end of the Bretton Woods system of fixed exchange rates. In this context, the highest profile proposals have been put forward by the Stiglitz Commission and the PRC. These begin with the premise that, as demonstrated by the current global financial crisis, the risks of the current system of floating exchange rates exceed its benefits and fail in the overall objective of supporting trade and enhancing economic growth and financial stability. In place of the current system, both propose a new system based on an international reserve currency disconnected from individual nations that would be able to remain stable. While this is not a new idea, harking back to ideas of Keynes and discussions from the 1970s, it is the first major proposal along these lines from a major economy in decades.

Overall, achieving this would be a long-term vision, requiring a long-term process with specific deliverables. Several initial steps can be identified. The first is to strengthen surveillance of reserve currency countries—rather a reverse of the approach traditionally taken by the IMF. Second is to broaden the SDR. In this respect, several elements would be included: (i) developing a settlement system between the SDR and other currencies; (ii) promoting use of the SDR in international trade, commodities pricing, investment, and corporate accounts; (iii) creating financial assets denominated in SDR, for example from the IMF; and (iv) improving valuation and allocation, with the SDR based on a basket comprising all major economy currencies, GDP-weighted, with allocation on the basis of real assets. Both initial steps suggest entrusting member reserves to the IMF, with an open-ended SDR fund and centralized management.

Given the clear problems with developing any sort of international currency arrangement—such as financial services and investment—this is an area in which regional attention could focus. This, in fact, has been the approach taken in the EU since the 1970s, resulting in the single currency, and is currently under early discussions in Asia. At the same time, while currency arrangements can be regionalized, global macroeconomic surveillance remains essential—a fact highlighted by the global financial crisis. In addition, regional macroeconomic and financial surveillance mechanisms also

have clear value, as demonstrated both by the 1997/98 Asian financial crisis and the more recent global financial crisis, especially in the context of the euro area.

8.2.4 Financial Stability and Development

As highlighted by the November 2008 and April 2009 G20 meetings, financial regulation has been the central focus at the domestic, regional, and international levels in the context of the current crisis. In looking forward, three elements need to be addressed: (i) crisis prevention (largely focusing on regulation), (ii) crisis management (largely focusing on liquidity arrangements), and (iii) crisis resolution (focusing on mechanisms to address both sovereign and global financial institution crises).

Crisis prevention: Regulation

As a result of the global financial crisis, the pre-existing system based on the FSF, while not fundamentally a cause of the crisis, has been exposed as insufficient to meet the realities of global finance and its attendant risks. In looking at this issue, there are a variety of potential approaches.

At the most fundamental level is the question which was addressed at Bretton Woods: whether on balance finance should be global. While the decision taken at Bretton Woods was in the negative, in the context of the global financial crisis, despite some misgivings, the consensus appears to be settling in favor of continued globalization of finance, albeit with enhanced mechanisms for prevention and resolution of problems arising.

In this context, the discussions in many ways have followed the forms of global administrative law, with approaches ranging from a traditional hard law treaty-based approach centered on a formal international organization down to uncoordinated domestic responses. While the latter have been found to be ineffective in the context of global finance (albeit not domestic finance under the Bretton Woods design), despite periodic proposals for a global financial regulator, a traditional international law/international organization approach does not seem feasible at this time, even in the context of the EU: issues of domestic sovereignty continue to make a global regulator for global finance unlikely for the foreseeable future. In looking forward, on balance, it appears to make little sense to incorporate financial regulation into the WTO framework, both because the WTO system is already overburdened and also due to its focus on negotiated liberalization combined with dispute resolution, which is not overly useful in the context of financial regulation. At the same time, however, if amendments were to be undertaken to the IMF Articles of Agreement, then this would also present an opportunity to provide the IMF with a specific mandate and related tools in relation to financial stability.

At the other end of the spectrum, purely soft law cooperative arrangements, such as the BCBS and the 1988 Basel Capital Accord, as existed until 1999 have proven ineffective in preventing and resolving international crises. Following financial crises in the 1990s, to some extent, the cooperative mechanisms were given a greater level of coordination through the FSF and a higher level of formality through the FSAP monitoring mechanisms. Once again, however, a hardened soft law approach of coordinated networks with limited external monitoring of compliance proved insufficient to address either prevention or resolution of a truly global financial crisis.

Discussion has thus turned towards intermediate arrangements. At the next level down from a formal international law/international organization approach are discussions of creating a formal legal underpinning for the existing network model. While this is the approach which is largely being pursued in the EU following the Larosière Report, with European authorities composed of domestic agencies responsible for setting regional regulation but with domestic enforcement, this approach has not yet been followed at the international level and may still prove impossible even in the EU context.

Instead, the approach which has been adopted at the international level by the G20 is a further strengthening of the pre-crisis system, through the transformation of the FSF into the FSB, with a wider range of member commitments and strengthened peer review and external monitoring mechanisms. Overall, the FSB might work reasonably well when it comes to coordination and prevention functions without it being a formal, legally based international institution, but the issue which remains is how to handle cross-border financial institution failures. Although the FSB will play a role in facilitating discussion among its members, what is lacking from the system is the ability to put its members under binding obligations that will lead to a greater willingness to burden-share the costs of cross-border bank failures. Some form of binding arbitration mechanism might be the best way to achieve this (and this in fact is the approach being pursued in the EU), but without a more formal and binding arrangement for burden sharing and dispute resolution arrangement, probably through a formal treaty and/or international organization, the problems raised by the failure of global financial institutions will not be adequately addressed by the current approach to international financial regulation. In many ways, these were amongst the major causes of the systemic phase of the global financial crisis, failing to properly address these issues must be seen as either indicating that significant risks will continue to exist in the context of global finance or a tacit conclusion that finance and financial institutions will no longer in fact be global. Unfortunately, based on the unsuccessful experience of the IMF's proposals for a sovereign debt restructuring mechanism,[194] the outlook for failure resolution mechanisms for cross-border financial institutions is not overly bright.

Crisis management: Liquidity

Assuming that crises will occur in the future—both at the economy-wide level and in individual global financial institutions and markets—there is a clear need to put in place appropriate liquidity arrangements in advance. One lesson of the current crisis has been the essential need for appropriately structured mechanisms for liquidity provision in times of stress; a liquidity provider of last resort ready to provide liquidity to solvent borrowers on the basis of any reasonable collateral is required. Those central banks, such as the ECB, that planned in advance for such circumstances and built the appropriate systems were best placed to manage liquidity provision during the acute phases of the crisis.

At the international level, there are two sides to this: (i) economies which experience temporary liquidity problems, including a range of major emerging market economies during 2008–2009; and (ii) private financial institutions. In relation to economies, the initial response largely came from the major central banks, especially the Federal

[194] See IMF, Proposals for a Sovereign Debt Restructuring Mechanism, http://www.imf.org/external/np/exr / facts/sdrm.htm

Reserve and to a more limited extent the European Central Bank, through swap and credit lines. This, however, is a function which could reasonably be centralized with the IMF and MDBs—a process which appears to be now underway.[195] The weaknesses—already identified by the G20—is that any such arrangement in today's global financial system must be backed by the availability of very large amounts of money, certainly beyond the IMF's current capacity. As such, the mechanism—essentially an emergency liquidity mechanism—requires major extension of the IMF's access to funding, including SDR allocations and multilateral borrowing arrangements, including potentially from not only public sector lenders but also private sector lenders. In addition, regional arrangements—such as those being developed through CMIM and currently being considered in the EU—can provide a useful addition to international arrangements.

At the level of private financial institutions, the IMF is not well-suited as a potential liquidity provider of last resort. As a result, it seems that individual private financial institutions are likely to remain quite closely associated with their home jurisdiction and the major central banks of jurisdictions in which they operate. This highlights the usefulness not only of swap lines from major reserve currency central banks but also regional arrangements.

Crisis resolution

Unfortunately, not all crises are liquidity crises and it is certain that in the future both economies and individual financial institutions will periodically face insolvency. In the context of resolving international insolvencies, the IMF has emerged as the default option; if problems are not severe, bilateral central bank, sovereign, or regional assistance may be available. However, in circumstances involving severe financial problems where financial system stability is at stake, the politically acceptable solution has been to turn to the IMF. This was certainly the reaction in Asia in the wake of the Asian financial crisis. But even in the context of Asia's discussions relating to IMF alternatives, in the context of severe sovereign fiscal problems, the IMF would in all likelihood be involved, much as has been the case in the EU with Greece.

Unlike sovereign crises, it is certain that the IMF is not the appropriate entity to address crises in individual financial institutions. At the moment, the solution is largely domestic, suggesting that individual economies must require separately capitalized and regulated subsidiaries rather than cross-border branching in financial services, and highlighting one of the greatest conflicts between financial services liberalization (negotiated through the WTO) and the requirements of domestic financial stability. As noted above, any other solution probably requires an international treaty, perhaps administered by the FSB. To the extent that international arrangements cannot be put in place, there is a clear role for regional arrangements, especially regional economic arrangements, such as ASEAN/ASEAN+3/ASEAN+6, which include provisions supporting cross-border financial services.

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[195] In the context of the IMF, through the new Flexible Credit Line, designed to provide large and upfront financing to members with very strong fundamentals and policies. In addition, ADB has established a Countercyclical Support Facility, which provides short-term, fast-disbursing loans to support DMCs supplement countercyclical fiscal spending in adverse market conditions. The African Development Bank (Emergency Liquidity Facility) and the Inter-American Development Bank (Liquidity Program for Growth Sustainability) have launched similar facilities.

8.3 The Asian Regional Financial Architecture

Overall, many of the G20 commitments relating to the international financial architecture are now in progress, with significant developments likely by the November G20 meeting in Seoul. At the same time, while international arrangements are highly significant, it is likely that certain aspects which are not realizable at the global level may instead be dealt with at the regional level. In this context, the EU provides the leading example but also highlights the very real difficulties involved for other regions, including across Asia.

The extent of financial integration between East Asia's emerging and developing economies and Japan matches neither the rhetoric expended in its support after the region's 1997/98 financial crisis nor the degree of regional economic integration.[196] By some measures, it is exceeded by financial integration with Australia, New Zealand, and most developed western economies. Cross-border trade flows, direct investment, and cross-border investment in capital goods have long been greater and faster growing than other regional capital flows. This dichotomy persists despite certain developments since the early 1990s that might have encouraged financial integration. It contrasts with financial integration in the EU, with national enthusiasm in Asia for participation in the WTO, and with the sophistication of financial intermediation in several Asian financial centers. Above all, it differs from post-Asian financial crisis consensus expectations that greater financial integration would help guard against future shocks or ameliorate their effects.

Four factors have encouraged discussions and initiatives concerning Asian financial cooperation, integration, and governance in the last decade. These relate especially to the 1997/98 financial crisis, but also to growing economic integration, developmental issues, and certain political influences. The means by which these factors encouraged integration are relevant to the policy formation processes customarily used by Asia's regional bodies.

Asian financial integration has been subject to considerable but equivocal attention. Here, the region's transnational organizations are important for two reasons. First, they represent extant regional institutions and their limitations illustrate an uncommitted approach to regional governance; second, they have supported national actors with funding and technical assistance for financial reform. Initiatives to encourage financial integration have in particular addressed trade in financial services, cooperation in external monetary operations, and capital market reform.[197]

8.3.1 Trade in Financial Services

Limited growth has occurred in regional trade in financial services and any improvement is likely to occur only slowly. To date, cooperation in financial services liberalization has made limited progress. At the same time, the various ASEAN/+3/+6 trade agreements in force or under negotiation all address trade in financial services, in addition to goods trade and investment. As these agreements are implemented and their use develops, it

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[196] See Arner, Lejot, and Wang (2009).

[197] Japan's strategies for financial cooperation, including reforming taxation through a web of new treaties, are beyond the scope of this analysis.

is likely that aspects relating to financial services trade will receive increasing attention as financial institutions seek to maximize opportunities in the region. At the same time, as clearly demonstrated by the EU's experience in the global financial crisis, liberalization of trade in financial services brings with it much greater potential complications than is the case with trade in goods or even investment. As financial institutions expand regionally, the region will need to pay particularly close attention to addressing risks raised by cross-border financial institutions, including their regulation and resolution.

8.3.2 Monetary Affairs

Regional monetary cooperation is mainly evidenced by ASEAN+3 short-term credit lines. An AMF was mooted during the 1997/98 financial crisis when several Asian states required sudden infusions of credit but was abandoned upon intense US opposition.[198] The 2000 ASEAN+3 CMI was intended to promote regional cooperation by means of bilateral currency swap agreements among central banks.[199] More recently in 2008 and 2009, ASEAN+3 finance ministers agreed a new accord to pool additional international reserves on a more considerable scale (CMIM). This would involve administrative resources separate from those of participating states and is currently planned to total US$120 billion in commitments. The PRC, Japan, and Korea would together provide 80% of the total and ASEAN members the remainder.[200]

At inception, 20% of the aggregate amount available for drawing under CMIM by a user state would be "de-linked" from specific IMF conditionality, but subject to rules to be developed by ASEAN+3 members.[201] However, the arrangement would "supplement the existing international financial arrangement,"[202] which suggests rules for usage that would be sufficiently robust and well understood so as not to erode market confidence in either the scheme or a user in need of temporary liquidity. ASEAN+3 stresses that usage would be subject to "rigorous principles."[203]

The functions allotted to CMIM will include an independent surveillance process that would precede drawings or advances, either as an ongoing monitoring exercise or specific to requests for credit. For the scheme to be credible—regardless of its scale of commitments—those resources would need to be both separated from existing national resources and extended beyond the collaborative arrangements to which ASEAN+3 states are accustomed.

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[198] A regional monetary fund was discussed again within ASEAN+3 in April 2006 in terms of benefits associated with a long-term currency alliance and monetary union.

[199] See ASEAN+3 (2000).

[200] ASEAN+3 (2008, 2009).

[201] ASEAN+3 (2000).

[202] Ibid.

[203] ASEAN+3 (2009).

8.3.3 Capital Market Development

Post-crisis attention to regional capital market development initially focused on the debt and money markets, but has recently begun to consider wider securities market reform.[204] Work on debt market development has focused on the ASEAN+3 ABMI.[205] It also includes EMEAP central banks' pooling of international reserves in two Asian Bond Funds in 2004 and 2005, with additional funds under discussion. As in similar matters, success has been limited due to the reluctance of state actors to cede national governance to create regional policy capital. Insufficient effort has been made to sanction non-bank financial intermediaries holding foreign regional assets, although they typically enjoy far greater freedom to acquire higher-rated OECD investments.

8.3.4 The Role of ADB?

ADB combines regional interests and elements of regional governance. While its operations focus on regional development, 19 of the Bank's 67 shareholders are non-Asian OECD members that together account for 34.96% of votes in the bank's supervisory Board of Governors. Members of the G7 hold 39.56% of votes in the Board of Governors, the latter electing a 12 person Board of Directors, four of whom represent non-Asian members. The PRC, Japan, the US and India each nominate a director to serve their sole interests. As with other Asian organizations, the regional interests of ADB policy may not coincide with the aims of all shareholders. Asian policymakers have been supportive of ADB efforts because of the weak institutional basis of other bodies, including ASEAN and APEC.

At the same time, ADB has given material support to financial sector cooperation, and policymakers generally welcome its efforts because of a lack of resources and institutional weaknesses in ASEAN and APEC. For example, ADB became involved in a coordinating function with the CMI in 2005 and established six groups in 2002 to support market development with funding and technical assistance at the same time as the launch of the ABMI by ASEAN+3.[206] ADB also views its own local currency funding transactions as developmental, although they rely more on the structuring resources of private law than reforms in national policy, and hopes to widen the availability of market information through a web portal more comprehensive than many commercial or national sources.[207]

More significantly, an Office of Regional Economic Integration (OREI) was established in 2005 to seek to promote economic cooperation and integration among the bank's developing member countries and contribute to the region's "harmonious economic growth."[208] This is part of the agenda of the current ADB president, placing emphasis on

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[204] ASEAN+3 is studying cooperation among exchanges and regulators to encourage cross-border trading.

[205] Thailand initiated the ACD in 2002 among ASEAN+3, India, and fourteen other central Asian states to explore regional cooperation to encourage capital market activity. The group's visibility fell after the end of Thailand's APEC chairmanship in 2004.

[206] Pholsena (2004).

[207] See http://asianbondsonline.adb.org.

[208] Kuroda (2005). OREI was created in April 2005.

regional economic and financial integration, and in providing resources and funding for research and related technical assistance projects and investments. This is an important distinguishing feature of ADB compared to other MDBs operating in the region. As a reflection of the potential of this role, a 2007 study by an ADB Eminent Persons Group[209] found agreement with these reforms which were later carried forward in the Long-Term Strategic Framework of the Asian Development Bank—Strategy 2020.[210]

8.4 Designing an Asian Financial Architecture

Could the current global financial crisis provide an incentive to financial sector development and integration in the region? Asia's financial systems have so far been less systemically affected than the EU and the US, although Asian banks and other intermediaries have suffered losses in capitalization and confidence in a similar, though less dramatic, fashion to their western competitors.

The global financial crisis has hastened changes to the setting for international economic and financial cooperation, chiefly a migration from the G7 and G10 mechanisms to the G20—which includes the PRC, India, Indonesia, and Japan from Asia—and the enlargement of the FSB. As a result of the crisis and the view that the participation of major developing economies, especially from Asia, is central to its resolution and the necessary reforms to the international financial architecture, Asian states are being asked to assume a new prominence at the international level, with the PRC's role becoming increasingly prominent.

As discussed above, any redesign of the international architecture should have a number of central elements: (i) economic policy cooperation, coordination, and surveillance; (ii) trade in goods and services liberalization; (ii) financial stability and development arrangements (including prevention, management, and resolution); and (iv) sustainable development coordination and assistance.[211] Assuming that these issues will not entirely be addressed at the international level, it is important for discussions in Asia to look to address necessary elements on a regional basis.

At present, economic policy cooperation and coordination in Asia takes place through ASEAN/+3/+6 Finance Ministers meetings and EMEAP, while surveillance is largely limited to the IMF and ADB. These arrangements may be sufficient for coordinative purposes; however, surveillance arguably requires a higher level of attention, with the CMIM having the potential to provide an appropriate framework, if effectively designed and implemented.

Trade in goods is being addressed to date through ASEAN/+3/+6 treaty-based arrangements. However, based on the WTO experience, as these develop, it is likely that a more effective dispute resolution framework may become necessary, although at the moment the international arrangements through the WTO seem to be fulfilling this function. In financial services, because of the interaction between liberalization and

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[209] Eminent Persons Group (2007). The group comprised Supachai Panitchpakdi, Isher Judge Ahluwala, Nobuyuki Idei, Caio Koch-Weser, Justin Yifu Lin, and Lawrence Summers.

[210] The Long-Term Strategic Framework of the Asian Development Bank 2008–2020.

[211] See generally Arner (2007); Weber and Arner (2007); Arner and Buckley (2010).

stability, these issues are likely to become more problematic, as has been the case in the EU during the current global financial crisis. While liberalization may proceed, especially as regional and global financial institutions seek greater market access, it would appear best for economies for the foreseeable future to adopt arrangements for cross-border provision on the basis of separately capitalized and regulated subsidiaries, rather than following the passport system which has been adopted in the EU.

In relation to financial stability, initial discussions have now taken place regarding the possibility of establishing an AFSD, with a standard-setting and surveillance mandate similar to that of the FSB but operating in the regional context—in this context, EU experiences are likely to be highly relevant. Such an arrangement could have significant benefits not only in enhancing financial stability, but also in providing guidance and direction for financial sector development in the region.

The CMIM provides the outline of a potential crisis management structure and a potentially important liquidity mechanism in the region, though its eventual effectiveness will largely depend upon the design of its implementation arrangements. However, even under the CMIM, crisis resolution at the sovereign level—as in the 1997/98 Asian financial crisis—remains with the IMF, with support from ADB and the World Bank. As is the case generally, there are no arrangements to deal with the resolution of individual financial intermediaries other than at the domestic level,[212] nor with the contagion impact of systemic losses of confidence that can affect several or all economies in a region.

If CMIM were to evolve into an AMF, it would seem logical to combine liquidity provision and macroeconomic standard-setting and monitoring with more formalized arrangements for developing and monitoring regional financial regulatory standards, based on the experiences of the FSB and the EU, with arrangements of a firmer nature than those of the FSB currently, but not of the same level as those in Europe. One model is IOSCO's MMOU, with a self-regulatory structure applying to standard-setting and monitoring, with support for implementation from the ADB.

This highlights the important link between the macroeconomic and financial stability standard-setting and monitoring arrangements in the operations of the liquidity mechanisms of any AMF. The division between liquidity issues and sovereign financial crises is not always clear; both this issue and the supporting mechanisms merit the greatest design attention. CMIM will itself require dedicated resources to be effective and give confidence, even if the preparatory development work can be accommodated by a collaborative arrangement to which the member states are most accustomed. Institutional developments of this kind also provide an opportunity to consider the proper organization of the functions outlined here, whether or not formalized into a new AMF, including purposes, extent of non-Asian involvement, if any, conditions for usage, and whether any single state will lead the initiative.

[212] International and domestic arrangements for addressing financial intermediary failure are an issue of current concern for the G20, see Arner and Norton (2009).

9. Challenges Ahead and Policy Options

The global financial and economic crisis has highlighted three major types of weaknesses. First are weaknesses in financial regulation and supervision. Second are the limits of export-led growth and dependence on Western markets. Third are the weaknesses in the reserves accumulation model. There is clear motivation to restructure these underlying imbalances, through developing domestic and regional growth sources, as well as other markets outside the developed world, especially emerging markets globally, with financial sector development playing a central role.

In relation to financial weaknesses, seven aspects of financial regulatory design needed to address systemic risk can be identified: (i) a robust financial infrastructure, especially payment and settlement systems; (ii) well-managed financial institutions with effective corporate governance and risk management systems; (iii) disclosure requirements sufficient to support market discipline; (iv) regulatory systems designed to reinforce risk management and market discipline, as well as setting and monitoring potential risks across all financial institutions; (v) a lender of last resort to provide liquidity to financial institutions on an appropriate basis; (vi) mechanisms for resolving problem institutions; and (vii) mechanisms to protect financial services consumers, such as deposit insurance.

The global financial crisis has highlighted significant weaknesses in each of these seven aspects, which are currently being addressed by the G20. At the same time, however, Asia faces issues beyond those highlighted by the global financial crisis.

First, in relation to infrastructure, the central weakness exposed by the crisis has been in relation to the current bilateral structure of OTC derivatives transactions. In this context, the bilateral structure resulted in counterparty risks which were not adequately addressed either by market participants or regulators. However, in Asia, payments systems remain underdeveloped in many jurisdictions. Likewise, cross-border payment systems, especially for regional currencies, are still at the early stages of development. As a result, while OTC derivatives regulation has been a central focus of the G20, payments systems development presents perhaps greater concern in Asia, especially given the limited development of OTC derivatives markets in the region. From the standpoint of financial sector development to support growth, the development of effective, robust payment systems are essential to making financial resources available in individual economies and across the region, and in supporting the use of savings within the region and rebalancing financial resources towards regional development.

Second, in relation to corporate governance, it has become evident that many financial institutions failed to adequately manage their own risks or businesses prior to the global financial crisis. This is certainly one of the central failures in the global financial crisis. Likewise, this remains a central concern in Asian markets dominated by bank financing. Especially in economies dominated by small numbers of banks, effective corporate governance is a fundamental concern, not only for stability but also for development. There is thus a clear need to continue the development of well-managed financial institutions with effective corporate governance and risk management systems at both corporations and financial institutions.

Third, disclosure requirements were not sufficient to support transparency and market discipline. In fact, systemic risks arose due to asymmetric information—essentially, weaknesses in transparency and disclosure. Such issues are characteristic of the highly complex structured products, which acted as the transmission mechanism of the excesses preceding the crisis and led to adverse selection issues during the crisis. The activities of CRAs exacerbated such issues both prior to and during the crisis.[213] In this respect, transparency is fundamental not only to stability, but also to effective market functioning and should be a continuing major focus in the region, domestically and regionally. In this context, special needs relate to human capital development to support effective financial information provision and market discipline.

Fourth, in relation to prudential regulation, in most cases, systemic risk did not arise from areas which were the subject of regulatory responsibility. Rather, in most cases, risks arose primarily from areas which were largely unregulated. Examples include mortgage broker activities, off-balance sheet activities of banks, thrifts and securities firms, OTC derivatives, and non-traditional activities of insurance companies. In these cases, risks often arose from regulatory arbitrage as financial firms actively moved activities outside of regulated areas. Such regulatory arbitrage was also in many cases made possible by the splintering of financial regulation in the US across a large number of regulators, with individual regulators usually less concerned about activities falling outside of the scope of their major responsibilities. In addition, systemic risks arose due to improperly designed prudential regulatory standards, especially in relation to capital, liquidity, and leverage. In this respect, appropriate coverage of regulation is an essential focus throughout the region, especially with regard to improving the quality, quantity, and international consistency of capital, including regulation to prevent excessive leverage and requiring buffers of resources to be built up in good times.

Fifth, systemic risk arose due to the lack of appropriate mechanisms to deal with problems which arose from unregulated and/or unexpected sources. Examples include the necessity of rescuing AIG and also the lack of a mechanism for appropriately resolving Lehman Brothers. Prior to 2008, liquidity was generally limited to banks. The crisis exposed the limitations of the separation of liquidity provision from prudential regulation, most obviously in the cases of Bear Stearns, Lehman Brothers, Merrill Lynch, and AIG. In addition to the clear need for effective resolution mechanisms for banks, the lack of a similar mechanism capable of dealing with non-banks or financial conglomerates (whether bank, thrift, or other financial holding company structures) has highlighted a key weakness in most regulatory systems.

In the context of finance, related aspects include mechanisms to address currency and financial stability and reduce the need for domestic reserve accumulation, with the potential to formalize the CMIM into an AMF. In addition to reserve cross-sharing and macroeconomic monitoring, an AMF should also address related issues, including regionalized financial regulatory norms and standards, and their monitoring, along with coordinating financial liberalization. In other words, an AMF could provide the formal mechanism to underlie the AFSD. An appropriately structured AMF could also serve both an accreditation function and an incentive function for countries which are not currently involved in CMIM. In other words, AMF membership could be predicated on achieving certain minimum requirements necessary for participation. Such membership

[213] See Lejot, Arner, and Schou-Zibell (2008).

requirements could provide guidance and incentives for developing Asian countries to take certain steps in terms of macroeconomic and financial stability.

Beyond stability, there is a clear need for financial sector development across the region; first, to support regional allocation of financial resources, and second, to support economic growth. In this context, Asian financial norms and standards should focus not only on stability but also on development, which would be quite different from existing international or EU norms. While an AMF is most useful for centralizing and formalizing stability related functions, ADB probably is the best locus for supporting continued financial development in the region—a role it is already playing effectively and which it has prioritized going forward.

ADB can play an increasing role in both supporting financial stability in the region and supporting economic growth through appropriate financial sector development, especially as the region restructures its economy and financial sector towards more balanced growth and development. In this context, ADB provides assistance for its developing member economies' financial system development through (i) financial support, (ii) policy advice, and (iii) technical assistance for policy implementation and institution building. ADB also is available to ensure that developing economies in Asia continue to have sufficient access to finance to support financial stability and economic development, especially in acting in a counter-cyclical manner by providing credit where needed—including trade finance. More generally, ADB supports existing work within ASEAN and the wider regional architecture—such as ASEAN+3—on economic monitoring, surveillance, and policy dialogue; capital market development; and credit and investment support.

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