ADB BRIEFS

NO. 5
SEPTEMBER 2010

Key Points

- Financial innovation promotes more efficient resource allocation and mitigates risks for higher-return projects, ultimately boosting growth and welfare.
- Yet gains from higher economic growth contributed by financial innovation can be illusory if they entail a heavy cost in the form of crises.
- Financial regulation needs to keep up with the speed of innovation to maintain stability in a fast-evolving environment.
- The recent global crisis highlights the region's unfinished reform agenda and the underlying structural weaknesses of its financial systems.
- Domestic and regional standards and guidance need to be developed in line with global standards.
- Reform of the new global financial architecture needs to address global imbalances, financial regulatory gaps, and inadequate representation of emerging economic powers in global governance systems.

JEL Classification: G10, G20, G30, G18, G28, G38
ISBN 978-92-9092-117-2
ISSN 2218-2675
Publication Stock No. ABF102496

New Financial Reforms and Their Effects on Emerging Asia[1]

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The global financial crisis of 2008/09 has prompted a reassessment of financial regulation and supervision. Many note that regulatory changes in the global financial system inevitably slow financial innovation and economic growth. Will a wave of regulation and reform in the wake of the crisis also limit the ability of financial institutions to innovate? What are the likely implications for relatively underdeveloped emerging Asian economies?

What are the role and benefits of financial innovation?

In theory, new financial instruments, services, institutions, technologies, and markets enhance efficiency, help allocate financial resources to the most productive uses, mitigate risks for higher-return projects and, hence, ultimately boost economic growth and welfare. However, the crisis has highlighted the dangers of unbridled financial innovation. Modern, sophisticated finance has become synonymous with excess leverage, complexity, and obscurity.

Some innovations—notably collateralized debt obligations (CDOs), credit default swaps (CDS), and various other securitized and structured products—have been under intense scrutiny. Indeed, postcrisis financial reform talks include specific proposals to rein in these innovations—such as calls to ban naked short-selling and CDS, restrict synthetic CDOs, stop high-frequency/flash trading, and establish centralized clearinghouses for derivatives.

Few doubt that deeper and more efficient financial markets are important for economic growth. There is also evidence of strong links between financial development and economic growth in many developing countries. But to many, recent financial innovations seem to have benefited a relatively small group of financiers, with little evidence showing that it did the same to the broader economy.[2]

Financial innovation, like many other modern technologies, is a good thing when it is used properly and a bad thing when abused. One essential aspect of finance is to

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[1] The authors thank Maria Socorro Gochoco-Bautista for useful comments and suggestions and Roger Mercado for his data assistance.
[2] *The Economist* (2010).

mobilize savings for productive investments. In an ideal, frictionless world, innovations should promote efficient allocation of financial resources and, hence, enhance welfare. But the reality is far from the ideal. Information asymmetries and misaligned incentives are the prime suspects for shortsightedness and excessive risk taking. As such, the right reform should focus on improving transparency and promoting correct incentives.

Financial innovation can be beneficial for economic growth, yet not all financial innovations are welfare-enhancing. Financial markets are inherently risky and exposed to market failures associated with information asymmetries and moral hazards. An important issue here is that the gains from higher economic growth contributed by financial innovation can be illusory if they entail a heavy cost in the form of crises. Financial stability, whether internal or external, has intrinsic economic value. This is especially so for emerging Asia, which is highly open and thus vulnerable to the external environment. Thus, it is essential that financial regulation keeps up with the speed of innovation to maintain stability in a fast-evolving environment. From the perspective of emerging Asia, multiple dimensions of the "social" impact of financial regulation and reform—through enhancing economic and financial stability domestically, regionally, and globally—need to be considered.

New global regulation and reform could restrict world growth by retarding the speed of financial innovation—even the good kind—in turn hurting emerging Asia's growth. But it could also contribute to global financial stability, reducing the incidence of financial crises, and contribute to economic as well as financial stability in the region. So, whether the global financial system will be safer from future crisis with the reform is critical to assessing the social gains from the new regulatory reform.

Financial innovation can be beneficial for economic growth, yet not all financial innovations are welfare-enhancing

The objective of global regulatory reform is to build a resilient global financial system that can withstand shocks and dampen their effects on the real economy

What are the implications of global reform for emerging Asian financial systems?

The objective of global regulatory reform is to build a resilient global financial system that can withstand shocks and dampen their effects on the real economy. Lessons drawn from the recent crisis have led to specific reform proposals. Broadly, the key principles for reform include: (i) bolstering macroprudential supervision to reduce procyclicality and guard against a build-up of systemic risk, (ii) broadening the regulatory perimeter to include all systemically important financial institutions, (iii) improving international financial standards, and (iv) strengthening crisis-resolution mechanisms.[3] Yet, these proposals at the global level have raised concerns about their relevance to Asia's developing economies; as such they require further attention at the regional level. The following areas have been the focus of discussion:

- Establish a system-wide macroprudential supervisory framework to maintain financial stability by increasing the ability of regulatory authorities to correctly identify and address systemic risks. There is growing support for counteracting the procyclicality of capital and liquidity requirements through the business cycle. High leverage tends to magnify profits during booms for individual institutions, but lead to very large system-wide losses during crises. Developing countries, in particular, experience direct financial and economic impact from international economic and financial volatility and are vulnerable to a sudden reversal of capital flows associated with a loss of confidence globally or regionally. While it is important to build a comprehensive macroprudential supervisory framework at the national level, international and regional cooperation is crucial to help developing economies effectively manage and guard against the effect of volatile capital flows.

[3] For more details, see Financial Stability Board (2010a) and Financial Stability Board (2010b).

Establishing systemic arrangements—"global and regional financial safety nets"—is important to providing multiple layers of protection to developing economies with thin capital markets.

- Develop stronger capital and liquidity standards: Asian banking systems must work to meet international standards and improve their risk management practices (Table 1). Although their relatively strong capital positions exert considerably less pressure than their western counterparts, limits to bank leverage and short-term sources of funding under new capital requirements will further increase the need for well-developed capital markets in the region. Better risk management is a perpetual necessity for sound and efficient banking systems.

Table 1. Compliance with Core Principles for Effective Banking Supervision and with International Financial Reporting Standards—Asia and the Pacific

	Banking Supervision						Reporting Standards				
	FC	CiP	E	ID	NC	II	FC	CiP	E	ID	NC
East and Southeast Asia											
China, People's Republic of				✓						✓	
Hong Kong, China		✓							✓		
Indonesia			✓							✓	
Korea, Republic of						✓				✓	
Japan						✓				✓	
Malaysia						✓				✓	
Philippines				✓				✓			
Singapore		✓								✓	
Taipei,China						✓				✓	
Thailand			✓							✓	
Viet Nam						✓					✓
South Asia											
Bangladesh						✓				✓	
India			✓							✓	
Pakistan		✓								✓	
Sri Lanka						✓				✓	
Central Asia											
Kazakhstan			✓						✓		
The Pacific											
Australia		✓							✓		
New Zealand		✓							✓		

Notes:

FC = Full Compliance
CiP = Compliance in Progress
E = Enacted
ID = Intent Declared
NC = No Compliance
II = Insufficient Information

Source: EStandards Forum.

- Address "too-big-to-fail" or systemically important financial institutions (SIFIs): Global regulators acknowledge the vast diversity in the current conditions of individual financial systems, allowing room for differences in approaches to deal with "too-big-to-fail" institutions or SIFIs. Individual countries need to set criteria to properly identify SIFIs and provide special regulatory attention to these domestic SIFIs.

- Ensure proper loss allocation: For developing economies, it is recommended that adjusted charges relating to deposit insurance and customer protection arrangements be applied to the banking systems. This can also be combined with appropriate resolution arrangements including mechanisms to recover the costs of any government assistance to the extent possible.

- Improve the regulation of hedge funds, credit rating agencies, compensation practices, and over-the-counter derivatives: Asian jurisdictions should undertake an in-depth analysis of the structure and coverage of their respective regulatory systems to build a broader and more integrated regulatory system.

- Strengthen global accounting and financial standards: Asia's developing economies can benefit from implementing international accounting standards, with regional support in implementation and related human capital development essential for effectiveness.

How should emerging Asia pursue financial development and regulatory reform?

Overall, in emerging Asia, there is continuing need for financial reforms at the domestic, regional, and global levels (Arner and Park 2010). Despite the crisis, the secular trend of financial innovation and globalization is unlikely to reverse and will continue to have profound impact on the global financial landscape. What is more important in this respect is that there is no knowing beforehand if a certain type of innovation is inherently destructive.

Individual countries need to set criteria to properly identify SIFIs and provide special regulatory attention to these domestic SIFIs

Despite the crisis, the secular trend of financial innovation and globalization is unlikely to reverse and will continue to have profound impact on the global financial landscape

Since the 1997/98 Asian financial crisis, significant reform and restructuring have swept across Asia's developing financial systems. The postcrisis reforms helped deepen and broaden the region's finance sectors, with significant financial asset growth, particularly in the nonbanking sector, together with strong growth in equity and bond markets (Table 2).

Yet the recent global crisis highlights the unfinished reform agenda and the underlying structural weaknesses of the region's financial systems. Banks continue to dominate financial systems across the region, whereas financial markets and institutions remain relatively underdeveloped and unsophisticated. While this relative lack of sophistication initially helped shield the region from toxic assets, limited tools for hedging and underdeveloped market infrastructure aggravated a weakening of investor confidence as the crisis unfolded. Despite the significant progress made, the region's capital markets remain thin. For example, local currency bond markets are still in their infancy in many regional economies, unable to provide reliable alternatives to bank lending. Also, a narrow domestic investor base leaves the market susceptible to high volatility.

Reform should therefore be a work in progress. Regulation needs to keep abreast with innovation, the structural changes in the financial sector, and globalized finance. Although there is no one-size-fits-all in regulation, it would be important to establish mechanisms to develop domestic and regional standards and guidance in line with global standards, while allowing for different stages of development.

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

	Finance Sector Assets[a]				Stock Market Capitalization[b]		Total Bonds Outstanding[c]	
	Deposit-taking Financial Institutions		Nonbank Financial Institutions					
	2000	2009	2000	2009	2000	2009	2000	2009
China, People's Republic of	157.5	200.6	5.1	15.8	48.9	82.7	16.9	52.3
Hong Kong, China	505.5	651.7	188.3	459.0	368.6	1,093.9	35.8	68.4
India[d]	64.5	103.5	15.6	29.0	69.9	205.2	24.6	48.8
Indonesia	63.6	34.7	8.7	11.4	16.2	39.8	31.9	18.2
Korea, Republic of	130.5	158.6	41.9	67.3	27.8	100.3	66.6	122.7
Malaysia	154.2	211.5	41.4	99.9	120.6	149.5	73.3	96.5
Philippines	99.2	83.1	23.9	20.0	33.3	53.6	27.6	39.2
Singapore	646.3	643.7	76.6	83.9	167.3	271.7	48.0	84.7
Taipei,China	256.0	295.9	29.4	92.2	75.9	173.5	37.7	57.5
Thailand	132.3	146.6	10.7	41.1	23.8	67.1	25.3	67.0
Average[e]	221.0	253.0	44.2	92.0	95.2	223.7	38.8	65.5
Median	143.2	179.6	26.6	54.2	59.4	124.9	33.8	62.2
eurozone	230.9	315.6	157.8	214.5	79.6	56.5	87.9	114.4
Japan	510.8	541.8	274.7	291.3	67.6	69.7	97.4	189.6
United States	79.6	107.9	279.3	314.1	152.1	105.8	138.0	175.8

GDP = gross domestic product.

[a] Finance sector assets data for Indonesia as of end-2001 and end-2008.

[b] Figures are computed using US dollar values of stock market capitalization and gross domestic product; except for the People's Republic of China and India, which were computed using their local currency units.

[c] Data covers domestic debt securities. Figures for the United States exclude nonmarketable government securities.

[d] Finance sector assets data for India refers to the end of fiscal year.

[e] Simple average.

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

Global financial reform should allow for the enormous development challenges faced by developing countries—to ensure that domestic financial regulatory systems keep abreast of global standards. This implies that global reform should be complemented and augmented by national and regional reforms, taking into account the very different characteristics of emerging market economies' financial needs. The following areas require particular attention:

- First, balancing regulation and innovation: The key challenge for regulators in emerging Asia is how to encourage and manage financial market development without stifling innovation. What the region needs is better rather than more regulation. The region's emerging market economies can also benefit from building the appropriate sequencing of reforms—to support financial development and economic growth at the domestic and regional levels. This includes a step-by-step approach as they move toward greater financial liberalization. Too rapid a pace of liberalization could impose unnecessary adjustment costs on the economies with less-developed financial systems. With appropriate sequencing, emerging market countries can also choose not to adopt unnecessarily sophisticated financial instruments

and services given the level of their financial sophistication and regulatory capacity.

- Second, supporting growth and development: Emerging Asia's underdeveloped financial systems remain an important hurdle to funding necessary development and ensuring sustained high growth. The region's financial needs for infrastructure and for small and medium enterprises (SMEs) are particularly significant. An important issue in bank financing of infrastructure is asset–liability mismatches. While infrastructure typically involves long-term finance, banks rely heavily on deposits as their main source of funds. The relatively limited presence of insurance companies, pension, and provident funds constrain sources of long-term finance in the region. Financing SMEs is another critical issue. While SMEs remain the main pillars of production and job creation in the region, many SMEs struggle with a lack of effective financial assistance, not only for their usual operations, but also for hedging against foreign exchange volatility and trade finance. It is important to encourage simple innovations to provide a better menu of financial services and products catering to the needs of small entrepreneurs and investors.

- Third, enhancing the legal and institutional framework: 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, a stable and effective financial system will not develop. In the past, weak financial sectors have often been liable for financial crises, including the Asian and global financial crises. A well-designed legal and regulatory framework is necessary to strengthen financial intermediaries and to help prevent the recurrence of crises. Particularly in the context of financial distress or crisis, an effective framework to support the resolution of failed banks and their orderly exits is crucial. Without one, crisis resolution becomes much more difficult, time-consuming, and expensive.

It is important to encourage simple innovations to provide a better menu of financial services and products catering to the needs of small entrepreneurs and investors

More transparency and disclosure, centralized trading, and investor due diligence can support local currency bond market development

- Fourth, developing local currency bond markets: The region's authorities must foster a broader range of markets—including debt and equity capital markets, securitization, and derivatives—to enhance financial system resilience. Vibrant local currency bond markets are particularly important for the efficient allocation of the region's vast resources. The development of local currency bond markets reduces massive inflows into, for example, United States debt securities, and hence helps unwind global imbalances. In addition, developed local currency bond markets can reduce reliance on foreign currency debt and its concomitant currency mismatches, thus reducing the burden of having to hold large foreign exchange reserves in many developing economies in the region. More transparency and disclosure, centralized trading, and investor due diligence can support local currency bond market development. As seen in the marked progress in the development of local currency bond markets (see figure below), regional initiatives, such as the ASEAN+3 Asian Bond Markets Initiative, have proved helpful in these areas.[4]

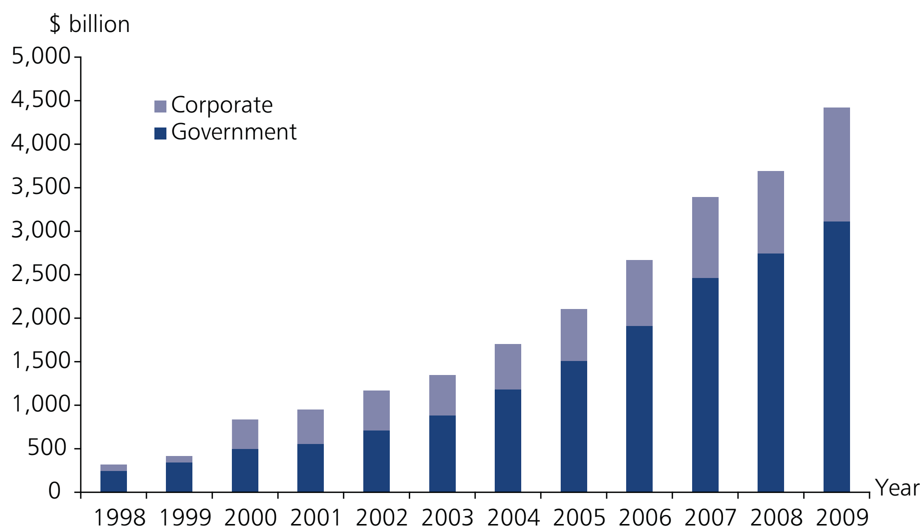
[4] The Asian Bond Markets Initiative (ABMI), endorsed by the ASEAN+3 Finance Ministers in 2003, has been in the forefront of several efforts to support bond market development in the region, resulting in a rise in issuance of local currency-denominated bonds and progress in various reform initiatives. The ABMI Roadmap, released in 2008, identifies four key areas that will be the focus of their work: (i) promoting the issuance of local currency-denominated bonds, (ii) facilitating demand for local currency-denominated bonds, (iii) improving the regulatory framework, and (iv) improving the related infrastructure for bond markets (AsianBondsOnline 2008).

Asia needs to actively participate and take on greater responsibility by establishing regional and subregional mechanisms to support economic and financial cooperation and coordination

- Fifth, establishing national and cross-border crisis management and resolution mechanisms: Globally, the financial crisis highlighted that, in addition to effective monetary policy, economies need effective arrangements to ensure financial stability. A comprehensive framework and contingency plan for financial institution failure is needed, including consumer protection measures such as deposit insurance. Such cross-border mechanisms also help avoid bouts of "financial protectionism" by promoting cooperation and encouraging cross-border financial burden sharing more efficiently.

As stated earlier, the objective of global regulatory reform is to build a resilient global financial system that can withstand shocks and dampen their effects on the real economy. Future financial systems may be safer yet simpler as a result. How to balance this reform impetus and innovation will have significant implications for economic growth and prosperity in developing Asia. Reform of the new global financial architecture needs to address global imbalances, financial regulatory gaps, and inadequate representation of emerging economic powers in global governance systems if it is to achieve sustained and balanced growth for the world. In this, Asia needs to actively participate and take on greater responsibility by establishing regional and subregional mechanisms to support economic and financial cooperation and coordination. This will also involve continued assistance and monitoring to complement and augment the G20 and Financial Stability Board reform efforts. Regional development banks, such as the Asian Development Bank, can play a pivotal role in supporting regional initiatives, offering financial and technical assistance to institution and consensus building.

Government and Corporate Bonds Outstanding—East Asia ($ billion)



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

Source: AsianBondsOnline.

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