

THE GLOBAL FINANCIAL SECTOR REGULATORY REFORMS AND THE EMERGING ECONOMIES¹

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1. Introduction

The purpose of this paper is to analyze the implications of the Basel III on the modernization of the financial systems of emerging economies, particularly in East and Southeast Asia, and their movement towards the market-based system. The priority in these economies lies in continuing the reform of the banking system so as to facilitate the development of an efficient market system and in developing deeper bond and capital markets to support future economic growth. Bank recapitalization and deleveraging were completed during the reforms that followed the Asian Financial Crisis (AFC) in 1997. Thanks to massive injections of sovereign bonds, banks in this region are now better capitalized, their external exposures have been reduced and their credit risks have been managed more effectively. Because of all this, banks in this region are well prepared to meet the capital requirements as scheduled under Basel III. Accounting standards, bank regulations and bank supervision have been improved. Credit insurance companies and inter-agency financial stability forums have been established to preserve financial stability and address financial crisis.

Basel III was mainly designed for banks in advanced industrialized economies with mature and well-developed financial markets. It primarily covers standards and regulations on shadow banks and complicated derivatives that do not exist in the emerging economies. To build effective and efficient financial markets, it strongly recommends the use of credit rating and credit scoring systems, and stress testing, all of which are difficult to implement in emerging economies. This is because of the weaknesses in the market infrastructure of the developing economies due to a combination of relatively weak legal and accounting systems, limitations on data availability, and the dominant role of state-owned enterprises, including in the financial system. State-owned banks and companies in these countries are implicitly guaranteed by their owners as they are the implementers of the industrial policies of governments. Meanwhile, private banks are intertwined with their business affiliates. Laws and

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regulations in the underdeveloped economies are also difficult to enforce in the public sector and against politically well-connected business groups.

In response to the Global Financial Crisis (GFC) of 2007-2009, the G20 Summit Meeting in Seoul on November 11-12, 2010, endorsed Basel III as the core element of the new financial regulatory framework. It is the basic foundation for transforming the global financial system, coordinated by the Financial Stability Board (FSB), so as to build a safer financial system and ensure its resilience to periodic stress tests. Basel III was developed by the Basel Committee on Banking Supervision (BCBS) and adopted by the Group of Governors and Heads of Supervision of the member countries of the BIS in July 2010. A higher global minimum capital standard for commercial banks was agreed on September 12, 2010.

Basel III comprises three areas designed to strengthen regulation and supervision of the banking system. First, improving the banking system's ability to absorb shocks arising from financial and economic distress. The focus on common equity mitigates the "too big to fail" problem and forces the bank to bear the cost of the failure they have imposed on society. Second, improving risk management and governance of the banking system and, third, upgrading transparency and disclosure. The Basel III framework covers both micro as well as macro prudential regulations. The micro type of regulations helps strengthen the resilience of individual banking institutions, while macro prudential regulations address wider risks that can build up across the entire banking system and the whole economy.

The rest of this paper is divided into four sections and a conclusion. The following Section 2 briefly discusses the implications of Basel III on bank capital. Section 3 analyzes some issues faced by the emerging economies in building effective and efficient financial market systems and ending financial repression. Section 4 discusses pressures to modernize the banking system and develop deeper bond and capital markets in emerging economies so as to provide long-term financing. At present, banks in these countries are mainly state owned and used to pursue government industrial policy. Private domestic institutions are closely linked to their business affiliates. Section 5 analyses the need to accumulate high countercyclical capital buffers and foreign exchange reserves in emerging countries as their economies are prone to external shocks and subject to the vagaries of cyclical factors in the international markets. Conclusions are provided in the final section of this paper.

2. Bank Capital Under Basel III

Basel III is not only a firm-specific risk-based structure but also a system-wide and systemic risk-based framework (Hannoun, 2010), which upgrades the standards relating to capital, liquidity and

leverage in the banking system. The combination of new micro- and macro-prudential reforms addresses both institution- and system-level risks. Basel III is more specific in defining the capital adequacy ratio: the capital ratio itself, the numerator of the solvency ratio or the capital, and the denominator or the risk-weighted assets. To mitigate the “too big to fail” problem, Basel III focuses on common equity, the highest quality component of a bank’s capital. This forces banks to bear the costs of the failures they have been imposing on society. In addition, Tier 1 also includes other instruments, such as retained earnings, other reserves and certain preference shares that have a loss-absorbing capacity on a “going concern” or solvency basis.³ Innovative capital instruments, which are currently permitted in limited amounts, will be phased out. Tier 2 capital will be simplified. It typically consists of subordinated debt, and provides loss absorbing capacity on a “gone concern” basis following insolvency and liquidation. Tier 3 capital used to cover a portion of a bank’s market risk capital charge is to be phased out, and deductions from capital will be harmonized.

Basel III uses a stricter definition of core capital and simplifies and harmonizes deductions and filters that are applied to its calculation, particularly in calculating Tier 3 capital. Stricter criteria are now to be applied to other qualifying financial instruments that can be included in the calculation of capital, and certain types of assets of questionable quality are excluded from the calculation. Basel III corrects the complex set of minimums and maximums of various elements of capital (Tier 1, Tier 2 and Tier 3) that was employed by Basel II. Before the Global Financial Crisis of 2007-2009, for example, global banks raised their leverage by investing the Tier 1 component of their capital in debt-like or hybrid “innovative” instruments. The stricter definition of capital level under Basel III upgrades the quality and significantly raises the required level of capital, improves its transparency and disclosure, and makes the capital adequacy of global banks comparable. The higher capital quality required will make banks stronger, improve their loss-absorbing capacities and allow them to withstand periods of stress.

There are three components of bank capital under Basel III, namely: (i) a minimum common equity requirement, (ii) a conservation buffer, and (iii) a countercyclical buffer. The capital conservation buffer is to enable banks to maintain capital levels above the minimum requirement throughout a significant sector-wide downturn. This conservation buffer should be phased in by January 2019 at the latest. National bank supervisors have more discretion in implementing the countercyclical capital buffer. The three components of bank capital should be raised through a combination of raising capital

³ Hannoun (2010) defines “Tier 1 capital is loss-absorbing on a “going corner” basis (i.e., the financial institution is solvent. Tier 2 capital absorbs losses on a “gone concern” basis (i.e., following insolvency and upon liquidation”).

in the market, and restricting discretionary payments such as dividends, share buybacks and bonuses to shareholders, employees and other capital providers. The restriction of discretionary distributions of banks' earnings will shift the risk as much as possible from depositors to shareholders and employees of banks.

Tabel-1 shows that Basel III raises the minimum common equity requirement to 4.5% of risk-weighted assets (RWA) from 2% under Basel II. In addition, a bank is required to hold another 2.5% of RWA as a capital conservation buffer to face economic stress. On top of these, Basel III requires banks to create a countercyclical buffer of between 0% and 2.5% of RWA during periods of excess credit growth. In total, therefore, banks need to maintain a common minimum required equity ratio of 7% of RWA. The Tier 1 minimum capital requirement is increased from 4% to 6% of RWA. Total Tier 1 capital needed to be maintained by a bank is therefore equal to 8.5 % of RWA. While the total capital requirement of a bank has been increased from 8% in Basel II to 10.5% of RWA in Basel III, "there remains the more difficult (if not impossible) job of setting accurate risk weight against which to measure capital" (Scott, 2011).

Table1 **Strengthened capital framework: From Basel II to Basel III**

In percentage of risk-weighted assets	Capital requirements							Additional macroprudential overlay	
	Common equity			Tier 1 Capital		Total capital		Counter-cyclical buffer	Additional loss-absorbing capacity for SIFIs*
	Minimum	Conservation buffer	Required	Minimum	Required	Minimum	Required	Range	
Basel II	2			4		8			
Memo:	<i>Equivalent to around 1% for an average international bank under the new definition</i>			<i>Equivalent to around 2% for an average international bank under the new definition</i>					
Basel III New definition and calibration	4.5	2.5	7.0	6.0	8.5	8	10.5	0 - 2.5	Capital surcharge for SIFIs?

*Modalities to be defined

Source: Caruana, Jaime. 2010. "Basel III : towards a safer financial system," a paper delivered at the 3rd Santander International Banking Conference, Madrid, 15 September.

The countercyclical capital buffer in Basel III makes Capital Adequacy Ratio (CAR) high during a boom period and low during sluggish period. This partly corrects the inherent pro-cyclicality of the capital regulation and mark-to-market accounting of Basel II that could precipitate an unnecessary crisis. The shortcoming of mark-to-market valuation of credit collaterals is a fundamental accounting issue faced by banking regulators and supervisors all over the world. Mark-to-market accounting distorts valuations during periods of market volatility, when the long-term value of assets differs from their market prices. Forcing excessive write-downs during a period when asset prices are below their fundamental values may lead to fire sales of illiquid assets that would result in a vicious circle of spiraling asset price devaluation.

The countercyclical capital buffer serves two purposes. First, to allow banks to grant credit during the period of stress and, therefore, prevent sudden drops in bank credit and the amplification of cyclicality through the banking system that push the real economy deeper into recession. The second purpose of the countercyclical capital buffer is to dampen credit growth or to act as a brake on bank lending that can cause asset price bubbles as its accumulation raises costs to the banking system. In reaction to capital shortages, banks can also reduce investment in risky assets in favor of safer investments, rather than raise additional capital.

The countercyclical buffer helps ensure the availability of bank capital to support ongoing business operations and credit extension during the period of stress. A sudden stop in bank credit during a period of stress creates a further decline in asset prices and increases non-performing loans that could precipitate an unnecessary crisis. This self-defeating process results in bank loans becoming scarcer. The capital buffer should be built up during times of economic growth to be used as a cushion to absorb losses in times of stress.

The increase in the level of capital requirements, better quality and transparency of the capital base, and better risk capture will increase the cost of banking and could curtail lending so as to negatively affect economic growth. To ease this, the Basel Committee has provided an ample 8 years transition period for banks to adjust to the new Basel III standards, i.e., from 1 January 2013 to 1 January 2019. This will allow the banking industry to satisfy the higher capital standards through retained earnings and other measures to raise capital.

The Financial Stability Board is still working on how to design the best framework for the oversight of systemically important financial institutions (SIFIs). It is broadly recognized that the loss

absorbing capacity of systemically important banks should be higher than the Basel III standards. According to Cecchetti (2010), this can be achieved by a combination of a systemic capital surcharge, the potential of bail-in debt to oblige lenders to these firms to bear some of the risk if the SIFI should fail, and contingent capital or financial instruments that can be written off or converted to common shares under certain conditions.

Like the systemically important financial institutions, there are also systemically important markets and systematically important infrastructure that go to the heart of the financial system in mature industrial economies. However, such rules on investment portfolios are irrelevant to banks in emerging economies that still rely on deposits and loans. The GFC in industrial countries in 2007-2009 indicates that the financial crisis originated from the trading book, particularly the complex securitization exposures such as collateralized debt obligations (CDO). The collapse of Lehman Brothers in 2008 indicated that the low capital charge on OTC (over-the-counter) derivatives did not capture the systemic risk associated with the interconnectedness and potential cascade effects in these markets. The Basel Committee has endorsed central counterparty clearing houses (CCPs) and trade reporting on OTC derivatives in order to resolve the problem of interconnectedness. The CCP system improves the management of counterparty risk, simplifies multilateral netting of exposures and payments, and increases transparency. To encourage the use of CCPs, the Basel Committee has suggested charge lower capital treatment for their use than those applied to bilateral OTC transactions.

To supplement the shortcoming of the VAR (value-at-risk) model that uses a normality assumption, the Basel Committee has encouraged banks to conduct periodic stress tests that better capture tail events and incorporate the systemic risk dimension in banks' risk management. Stress testing is an integral part of the internal capital adequacy assessment and capital buffer calculation processes under Pillar 2. Stress testing is, however, meaningless as long as banks are implicitly guaranteed by government.

Basel III introduces a leverage ratio to constrain the buildup of leverage in the banking industry. The current proposal by the Basel Committee is to test a leverage ratio of 3 percent of Tier 1 as part of the Pillar 2 supervisory review with a view to migrating this to a Pillar 1 requirement by January 1, 2018. There are two standards being proposed to ensure liquidity of bank assets. The first is the Liquidity Coverage Ratio to ensure that banks have sufficient high quality liquid assets that can be easily converted into cash, at low cost, to meet cash outflows for a 30-day period during a severe market shock. The second standard is the Net Stable Funding Ratio which is intended to promote long-term

funding, such as capital, preferred stock and debt maturities of more than one year or short-term deposits that can be renewed.

3. Moving to a market based system

To promote sustainable long-term economic growth, the Basel core principles and standards require the building of an effective and efficient market with low transaction costs, and corrections of market failures resulting from state ownership and family-owned banks. Such an efficient market with symmetric transfer of information can be promoted if there are good legal and accounting systems that protect individual property rights, enforce contracts and provide for due process. A good market should also regulate for market failures to prevent socially costly bank runs and crises. Meanwhile, both the internal and external stability of the macro economy should be ensured to allow business and investment to flourish.

The market failures and moral hazard regime in many emerging economies have diminished slightly with the end of financial repression, and the corporatization of state-owned financial institutions and improvements in regulatory systems. Meanwhile, stricter enforcement of legal lending limit regulations reduces the old practices of family-owned private banks mainly lending to themselves and their affiliated business ventures. Moreover, the newly established deposit insurance companies have replaced the blanket guarantee on bank deposits by limiting recoverable amounts. There is still a general perception, however, that state-banks will not go bankrupt as the government will always bail out its own banks if short-term liquidity is needed.

The governments of many emerging economies own more than one bank. It was a popular idea in the 1960s to establish state-owned development banks that would raise long-term savings, including through bonds, for financing long-term development projects. In reality, none of these development banks have raised long-term savings and all of them operate like deposit-taking commercial banks, and provide short-term commercial loans. In many countries, such as Indonesia and Brazil, both central and provincial governments have their own deposit-taking development banks, and many lower layers of government own rural credit institutions that compete with money lenders. State-owned banks in many emerging economies in Asia, except Singapore, are well protected and, as a group, enjoy a monopoly over public sector deposits.

During the long period of past financial repression, state-owned banks owned by the central government aimed their lending programs, based on low interest rates and low risks, at advancing

government industrial policy. These banks frequently had to provide a large volume of loans to non-bank state-owned enterprises operating under soft-budget constraints. The central banks provided liquidity credit for financing the credit programs either through expansion of their balance sheets or from foreign borrowings. Banks owned by provincial governments acted as cashiers for their owners and mainly provided loans to local government employees backed up by their pay checks. Through such operations, the state-owned banks were acting as quasi-fiscal agents and were insulated from systemic risks.

Weak commercial orientation and limited risk management discipline for self protection eliminated the incentive for managers of state-owned banks to monitor and manage risks, upgrade transparency in corporate reporting or provide relevant business information. Both the channeling banks and supervisors were more interested in checking that credit delivery was in accordance with the intended purposes. As credits were allocated based on a non-interest basis, and not always on economic considerations, supervisors classified loans based on repayment rather than the creditworthiness of borrowers or the market value of the pledged collateral. Such inefficient, non-price allocation of financial resources resulted in poor asset quality and high levels of non-performing loans. Bank supervisory officers at that time received little training in the field of credit analysis and risk management in banking sector organizations.

Traditionally, every business conglomerate in East and Southeast Asia owned at least one interconnected family bank. Prior to the AFC of 1997, the main role of such banks was to mobilize funds from the general public, to obtain low cost and risk free refinancing from the central bank, and to secure overseas borrowings for meet the financial needs of its commercial affiliates or subsidiaries. Non-arm's length transactions between banks and their affiliates were rarely detected and corrected by bank supervisors. The banks also provided credits to small and medium enterprises that were closely linked, such as suppliers and distributors. Consumer loans and mortgages to buy motor vehicles, appliances or real estate from group companies were supplied by affiliated banks.

Such practices improve credit efficiency as bankers have more information on affiliates compared with non-affiliates. Banks can also use internal information to assess the ex-ante risk of investment projects or persuade the borrowers to cancel risky projects. On the other hand, related lending is prone to insider trading and principal-agent problems, as banks tend to evaluate loan applications from affiliates less rigorously than would be the case with unaffiliated credit applications. The practice of giving preference to affiliated companies ended with the collapse of family owned banks

during the AFC and stricter implementation of tight prudential rules and regulations after the crisis. The legal lending limit rules restricted bank exposure to affiliates, including owners, managers and employees. Interest rate costs were expected to increase and return on bank equity to decline because of a combination of an increase in the (i) common capital requirement, (ii) conservative buffer and (iii) countercyclical capital buffer.

The transfer of bank ownership from conglomerates to foreign investors during the crisis years in 1997-1998 significantly reduced the share of lending going to business affiliates. The new owners increased the share of credit going to small and medium enterprises, as well as consumer credit to the household sector. To reach out to these classes of customers, the foreign banks introduced modern payment systems, such as credit cards, debit cards, ATMs and e-banking.

4. Pressures to modernize the banking system and to develop bond and capital markets

A combination of the WTO rulings on the trade in services, the need to rebuild the banking system following the AFC, and the development of bond and capital market resulted in pressure for the modernization of the banking industry. Foreign banks strengthened the governance structure of the banking industry, improved market competition and credit culture, and brought about a transfer of technology. The WTO rulings to liberalize the trade in services increased the penetration by foreign institutions of domestic banking markets and allow non-nationals to own 90 percent of the equity shares in joint venture banks. At the same time, the banking reforms in many emerging economies relaxed the geographical restrictions on foreign banks. Foreign investors increased their penetration of domestic markets through a combination of opening branches, merger and acquisition, and the purchase of collapsed banks from bank restructuring agencies.

The banking industry is also facing competition from the bond and capital markets. The regulatory tightening of Basel III that pushes up the operating costs of banks and interest rates provides an additional incentive for the further development of both long-term and short-term government bonds in Asia. The emergence of the bond markets in this region initially originated as a direct consequence of the AFC and the ensuing need to recapitalize financially distressed banks and finance public budget deficits. Government bonds play a dominant role in the structure of the bond market in China, Indonesia, Korea, Singapore, Thailand and Malaysia. Gradually, infrastructure projects in the power, telecommunications and transportation sectors began to issue bonds to raise funds for new investments.

To develop domestic bond markets, governments have taken some measures to reduce the barriers to entry, such as information gaps, disclosure standards, administrative controls, capital rules and other statutory and prudential provisions as well as monopolistic behavior. Accounting and regulatory standards have been upgraded, including full balance sheet disclosure. Modern central security depositories have been established to improve market efficiency, the procedures associated with offering securities have been streamlined to reduce regulatory costs, and oversight by key information providers has been strengthened, such as on the part of credit ratings agencies and auditing firms.

The ASEAN+3⁴ and EMEAP⁵ countries adopted a combination of market based and government-led strategies to develop their domestic and regional bond markets. To create and improve the workings of domestic bond markets and promote their regional integration, both the central banks of EMEAP and the Ministers of Finance of ASEAN+3 have taken measures to improve and harmonize market infrastructure. The governments have also helped establish rating agencies, introduce credit guarantee schemes, and enhance securitization. The menu offered by the regional bond markets has been diversified through the issuance of large amounts and greater diversity of government bonds.

The high interest rates in many countries in this region are also due to high cost of intermediation and the inefficiency of banking systems. The higher interest rates on bank loans provides an incentive for mobilizing capital from other sources, including the capital and bond markets. At present, financial intermediation is primarily in the form of bank lending rather than the issuing of bonds and equity on the capital markets (Table-2). Bank operations are mainly focused on traditional deposit taking and lending, and less concerned with the capital and bond markets. Domestic financial institutions avail of few financial innovations, such as structured products, derivatives and complex securitization. The shadow banking system, including finance companies, hedge funds and investment banks, are still at the early stage of development in emerging economies. They rely on short-term

⁴ Established by the Bangkok Declaration in 1967, the Association of South East Asian Nations (ASEAN) now has 10 member countries. The five founding member countries are Thailand, Malaysia, Indonesia, Singapore and the Philippines. Brunei Darussalam and the four countries of Indochina (Myanmar, Laos, Vietnam and Cambodia) joined the organization later. ASEAN's main purpose was largely political and regional security in the post cold war era. An inward looking ASEAN Preferential Trade Agreement (PTS) was launched in 1977 and modified in 1987. As neither of these agreements succeeded in promoting interregional trade, they were replaced by the ASEAN Free Trade Agreement in 1992.

⁵ EMEAP, or the Executives Meeting of East Asia Pacific Central Banks, has 11 members, namely, the Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, the Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore and the Bank of Thailand.

collateralized lending in the form of repurchase agreement. The emerging economies do not have shadow banks that buy mortgages and loans from banks, as well as corporate bonds and other assets, like credit card receivables, automobile and student loans, and then repackage and sell them in sophisticated but arcane ways to financial investors around the world.

A number of factors have deterred the development of the capital and corporate bond markets in this region. First, bank dominance and the availability of cheap and low risk credit from state-owned banks during the long period of past financial repression. Second, close family owned companies do not like to share ownership with outsiders. Third, the small size of companies makes raising funds through the capital and bond markets more expensive than bank financing. To save on the regulatory costs of public listing, those companies that resort to bond financing prefer private placements with a small number of investors. Fourth, legal uncertainties and weak institutions, particularly as regards due process, the insolvency process, creditors' rights and investor protection. Foreign owned firms rely on retained earnings and internal funding from their parent corporations, while state enterprises rely on capital injections from the government.

The high cost of intermediation is clearly shown by high banking spreads or net interest margins (NIM) that result from poor market infrastructure, including legal and accounting systems. The poor legal and accounting systems give rise to lower recovery rates and longer times to gain possession of loan collateral. High bank interest rates give rise to a competitive challenge for the banks from the bond and capital markets. At present, the bonds traded on the market are mainly the sovereign bonds issued in 1997 to recapitalize financially distressed banks and to finance government budget deficits. To supplement the small amounts of short-term Treasury bills, the Central Banks of Thailand, Indonesia, China and Korea issue interest bearing bills as instruments for open market operations.

The issuance of sovereign bonds in many countries in East and Southeast Asia started in 1998 for the purpose of recapitalizing financially distressed banks during the AFC in 1997 and for the financing of government budget deficits after the crisis. Particularly during the Cold War, public budget deficits in some countries in this region were financed by official development aid based on long-term maturities and low interest rates. To avoid foreign exchange risks, most of the government bonds are denominated in local currencies.

On the demand side, institutional investors, such as insurance companies and pension funds are not yet developed in these emerging countries. Of all the countries in this region, only Japan and Taiwan

have Postal Savings Banks that mobilize domestic savings from the general public at low cost. As a result, a large share of the sovereign bonds in many countries is absorbed by short-term foreign investors. As shown by the experiences of the countries on the periphery of the European Union, large short-term capital inflows to absorb sovereign bonds denominated in local currencies have eroded their external competitiveness and made their economies sensitive to capital flow reversals.

Table 2. **Size and Composition of Financial Systems in Asia**
(% of GDP)

Co5untry	Financial Sector Assets ¹							
	Deposit-taking Financial Institutions		Non-bank Financial Institutions		Market Capitalization ²		Total Bonds Outstanding	
	2000	2008	2000	2008	2000	2008	2000	2008
China	168.8	204.5	8.8	33.9	27.1	32.3	16.9	50.3
Hong Kong	505.5	640.7	196.4	573.8	363.9	610.9	35.8	42.9
India ³	61.6	91.6	15.4	32.8	33.3	59.7	24.6	35.3
Indonesia	63.6	48.6	8.8	13.7	18.7	21.7	31.9	13.4
Korea	147.9	192.7	44.1	62.6	31.2	56.3	66.5	86.2
Malaysia	154.2	190.3	16.5	20.2	124.7	89.6	74.8	73.5
Philippines	99.2	78.8	22.4	18.5	76.8	54.3	27.6	33.7
Singapore	683.8	707.9	39.1	47.1	243.7	148.0	48.0	70.8
Taipei, China	259.9	289.6	29.8	80.6	81.7	94.7	7.7	7.7
Thailand	132.3	137.7	10.7	33.0	26.0	39.2	25.3	51.6
Average ⁴	227.7	258.2	39.2	91.6	102.7	120.7	35.9	46.5
Median	151.1	191.5	19.5	33.4	55.1	58.0	29.8	46.6
Eurozone	230.0	315.8	142.1	169.3	-	-	124.2	69.4
Japan	227.5	230.9	118.5	132.1	71.7	55.8	97.4	193.4
United States	78.3	104.8	283.2	306.1	117.5	64.6	41.8	55.3

Notes:

1. Financial asset data for People's Rep of China (PRC) for 2002 and 2007; Hong Kong, China, for 2000 and 2007; Indonesia for 2001 and 2007; Malaysia for 2000 and 2007; and Japan for 2001 and 2004.

2. Market capitalization as percentage of gross domestic product (GDP) in local currency.

3. Financial sector assets data for India in 2000 refers to FY ending March 2000; and for 2008 ending March 2008.

4. Simple average

Source: Chee Sung Lee and Cyn-Young Park. 2009. Beyond the Crisis: Financial Regulatory Reform in Emerging Asia. ADB Working Paper Series on Regional Economic Integration No.34. September, Table1 Page 12.

The booking of government bonds from regional financial centers is also encouraged by tax treatment. Indonesia, for example, withholds 20 percent on both yield and capital gains from investment in debt securities and *sukuk*, Islamic shariah based bonds. But there is a tax treaty between Indonesia and Singapore for exempting withholding tax for non-resident investors that hold Indonesian bonds via Singapore.

5. Countercyclical Capital Buffer in Emerging Economies

The newly introduced countercyclical capital buffer in Basel III is relevant to the open and export-oriented economies in this region, which are inherently sensitive to the business cycles in the international economy. The effects can be positive and negative through either the goods market (exports and imports), market for factors of production, particularly uneducated and low-skill labor, and the international capital markets. Some labor-surplus emerging economies export largely uneducated and unskilled migrant workers to both the industrial countries as well as labor importing emerging economies, including in the Middle East. When industrial countries grow rapidly, the emerging economies experience favorable shocks from the rise in demand and international prices for their exports of energy, raw materials, food and labor. The cost of overseas borrowing fell during the low interest rate policy of the advanced countries prior to the GFC in 2007-2008, and quantitative easing thereafter. High international inflation tends to reduce the real value of foreign debt. The effects of the international economic environment on domestic economies are much greater for countries that apply outward-looking development strategies.

Conversely, by linking themselves to the world economy, such countries expose themselves to external shocks due to economic disturbances that originate in external events. Recession in the industrial countries reduces both the quantitative demand and prices for commodities and therefore produces adverse export shocks for emerging economies. Falling commodity prices and export revenues, and rising unemployment in labor importing economies, dealt a triple blow to commodity dependent and labor surplus emerging economies in 2007-2009. Political instability, as is now occurring in the Middle East, and the rise in unemployment in labor importing economies and the ensuing deportation of workers from these countries has increased pressure on the labor markets of the labor surplus countries. Unemployment benefit, healthcare and job-retraining assistance are practically non-existent in these countries. In addition, the exports and imports of the emerging economies are also

affected by other non-economic factors, such as harvest failures and subsidy policies in the advanced economies designed to protect their farmers. The wars in the Middle East in the 1970s and more recently resulted in rises in oil prices that adversely affected the balance of payments and government budgets in oil importing emerging economies.

The rapid economic growth of both China and India, two big emerging economies, over the past three decades has produced both opportunities, or positive external shocks, as well as threats or negative external shocks throughout the world, including among other emerging economies. The effects of these two big emerging countries “are so significant because of three things coming together: size, fast growth, and openness” (Humprey and Schmitz, 2007). Demand for energy and raw materials has been growing apace driven by rapid industrialization, urbanization and motorization in these two economies. The demand for high value food is growing fast due to rising consumer incomes, urbanization, demographic changes and the modernization of distribution system. The growth in demand for energy, raw materials and food has led to a rise in their prices relative to prices of manufactured goods.

In manufacturing industry, regional division of labor has emerged in Asia that has established complementarities between China and her neighboring countries. China imports capital goods, spare parts and components and other inputs from her neighbors in Asia to be assembled and re-exported to the international markets, mainly the United States of America and European Union. The slowdown in economic activity in the industrial countries also affected manufactured exports from the emerging economies. In contrast to the export of raw materials, prices of manufactured exports will not fall enough to clear the market as the prices are quite sticky. The undervaluation of the Renminbi is one of the key policies for export led development strategy. Exchange rate undervaluation is a protectionist trade policy as it is like a combination of an import tariff and export subsidy. The main victims of this exchange rate policy are the emerging economies that compete more closely with China.

Currency realignments or movements in the exchange rates of leading convertible currencies can have important effects on the prices of exports and imports, and the balance sheets of economic units, including financial institutions in emerging economies. In general, the international prices of the exports and imports of developing countries are denominated in the US dollar. Appreciation of the Japanese Yen and the Euro, for example, raises the dollar value of the external debts of emerging economies and increases interest payments in these appreciating currencies, while export revenues are mainly denominated in the US dollar.

A number of policy measures are available to the emerging economies in response to positive external shocks. These measures include retiring of external debt, slight appreciation in their exchange rates, strengthening the capital of domestic state-owned and private banks and lowering their non-performing loans (NPL), modernization and expansion of economic infrastructure and productive capacity, and accumulation of foreign exchange reserves. A number of countries in East and Southeast Asia (Brunei Darussalam, China, Timor Leste, Hong Kong, Vietnam, Malaysia, Singapore and Papua New Guinea) have established Sovereign Wealth Funds (SWF) as stabilization funds to insulate government budgets and the economy against price swings (Truman, 2011).

In general, those countries that were hit by the AFC in 1997 have introduced stringent short-run macroeconomic policies. These policies include shifting exchange rate management from managed floating or pegging to independent floating. This, supported by soft inflation targeting, has been the monetary operating strategy in these countries. This means that an exchange rate target is no longer used as a nominal anchor for monetary policy. The maintenance of inflation targeting as an operating strategy of monetary policy indicates the firm commitment of these countries to price stability, disclosure, transparency, central bank independence and refraining from printing money to finance budget deficits. An explicit inflation target, along with a more flexible exchange rate regime and explicit fiscal discipline that ensures a stable government debt-to-equity ratio are now the three main pillars of macroeconomic stabilization in many emerging economies. Emulating the Maastricht Treaty in Europe, public finance legislation in many emerging economies imposes fiscal rule by setting the ceilings of central government budget deficits at 3% of annual GDP and of each local government at 3% of its Regional Domestic Product (RDP). The ratios of public debt to GDP and RDP are set at a sustainable level of 60 %. These strict macroeconomic policies have protected these countries from the deep devaluations and steep increases in interest rates that devastated the balance sheets of banks and non-bank financial firms, particularly those with large foreign debts, back in 1997. Central bank accountability under the inflation targeting framework imposes costs on incompetent and opportunistic central banks.

In theory, flexible exchange rates require a smaller amount of foreign exchange reserves as the system reduces the need for market intervention. The central bank is free to respond to shocks, but cannot commit ex ante to the monetary policy that it will follow. On the other hand, under the fixed exchange rate system, the central bank subordinates monetary policy or domestic credit expansion to maintaining a constant nominal exchange rate. The flexible exchange rate system provides a greater

degree of monetary policy autonomy and protects output better from real external shocks because exchange rates can adjust and stabilize demand for domestic goods through switching expenditures. The flexible exchange rate system is expected to reduce one-way bets against the Rupiah, thereby discouraging short-term capital inflows that can be easily reversed. The need for self insurance is also reduced as it discourages a buildup of large un-hedged foreign currency positions by reducing the implicit exchange rate guarantees implied by the pegged system. The flexible exchange rate system stimulates development of the foreign exchange market as market participants are encouraged to seek prudential risk management and hedge against potential exchange rate risks.

The need for building up external reserves has been further reduced with the relaxation of loan conditionality by the twin Bretton Woods institutions that now offer flexible credit lines to meet the liquidity needs of those countries with good track records and sound macroeconomic policies. In 1997-98, the IMF programs demanded tight monetary and fiscal policies, deep devaluation and a wide range of deregulation and selling of state assets. Market based capital controls that were adopted by Chile and Malaysia were strongly criticized, as well as the formation of regional crisis financing facilities, such as an Asian Monetary Fund. Ten years later, in 2008, the IMF and the international community provides loans for fiscal stimulus, relaxes monetary policy and attempted to avoid competitive devaluations. In contrast with the past, now the IMF prescribes market based capital controls and blesses the formation of regional crisis financing facilities, such as the Chiang Mai Initiative in the ASEAN+3 countries and the European Financial Stability Facility (EFSF) in Europe. The need for crisis financing liquidity is also satisfied through a network of bilateral currency swap facilities.

In reality, for a number of reasons, many emerging economies have kept accumulating large international reserves following the AFC of 1997-1998 and GFC of 2007-2008 (Calvo and Reinhart, 2000). The first reason is to enable governments avoid extreme fluctuations of their currencies or excessive exchange rate volatility in a relatively shallow foreign exchange market and thus prevent adverse impacts on the economy and the balance sheets of the financial system, including the banking system. Strong financial sector policies with strict implementation of prudential rules and regulations, such as the net open position (NOP) of the banking system, encourage banks to hedge risks and avoid currency mismatches. The second reason is the fear of inflation from exchange rate pass-through under the greater exchange rate flexibility, particularly given the limited technical and institutional capabilities of central banks in such countries to implement transparent inflation targeting.

The third reason for accumulating external reserves is because the exchange rate is one of the principal policy instruments available to the emerging economies to both promote international competitiveness and efficiency in the domestic economy. The REER (real effective exchange rate) is a relative price, measured in the same currency, of a basket of goods in foreign currency set against the same basket of goods in the domestic market. On the external front, rising REER provides financial incentives to help improve the external competitiveness of the domestic economy vis-à-vis the international market and, hence, promote exports. This, along with fiscal discipline and structural reforms that increase productivity, will improve external competitiveness.

On the domestic front, a rising REER provides incentives for economic resources to migrate from the less productive, non-traded sector of the economy to the more efficient traded sector. Productivity can also be raised through labor training, transfers of technology and economy-wide deregulation and structural reforms. Appreciation of the domestic currency can trigger asset bubbles in the non-traded sector of economy, such as the land-based sector, including the property markets.

The fourth reason for the accumulation of reserves is to hedge against speculation and foreign exchange instability resulting from a shortfall in exports and capital flow reversals. As pointed out earlier, the exports of the emerging economies mainly consist of food, energy and raw materials, whose prices are inherently volatile and cyclical. Also as mentioned earlier, significant portions of government bonds and central banks paper in emerging economies are held by foreign investors and domestic banks. As shown during past crises, sudden capital flow reversals have raised both the interest rate costs and exchange rate risks of foreign borrowings.

The fifth reason for accumulating foreign exchange reserves is to maintain adequate fiscal space when facing a crisis. Expansion of aggregate demand through fiscal stimulus in the emerging economies should be backed up by adequate foreign exchange reserves due to the high average and marginal propensities to import in these countries. Those countries that were hit by the AFC were quite reluctant to turn to the IMF for help during the GFC in 2007-2008 because they were treated improperly when they sought help in 1997-98. The drying up of international capital inflows from private sources forced the crisis hit countries to adopt the painful IMF prescription, which was basically a mix of expenditure reducing and expenditure-switching policies.

5. Conclusion

Basel III was mainly designed to meet the needs of the financial systems of advanced industrialized economies. It fails to address the needs of emerging economies that increasingly occupy a prominent role in global finance. Basel III mainly focuses on regulating capital, liquidity, transparency and integrity of financial institutions in mature and well developed financial markets, including bond and capital markets as well as those for sophisticated derivatives and complex securitizations. In such mature markets, individual private property rights are well defined and protected. Contracts can be enforced promptly at low cost, and market failures can be corrected to prevent socially costly bank runs and crises.

By contrast, the legal and accounting systems need to be strengthened in emerging economies to protect individual property rights, reduce transaction costs and minimize market asymmetries. Weak legal systems fail to enforce contracts and ensure that realization of collateral pledged by credit defaulters. A case in Indonesia in May 2011 indicates that the legal system is unreliable even when it involves the use of debt collectors by Citibank to lynch one of its credit-card defaulters on Citibank premises. The disinclination of bank supervisors to enforce rules and regulations raises transaction costs.

Basel III's regulation of complex securitization exposures, such as collateralized debt obligations (CDO), are irrelevant to the emerging economies. This is because the shadow banking system, which includes finance companies, hedge funds and investment banks, is still in the early stages of development in these countries. The banking system remains the core of the financial system in emerging economies. Bank operations are mainly concentrated on traditional deposit taking and lending and less concerned with the capital and bond markets. Domestic financial institutions use few financial innovations such as structured products, derivatives and complex securitizations.

Moral hazard is still prevalent in the emerging economies. Except in Singapore, the roles of state-owned banks and financial institutions are still dominant in many emerging economies. Even in banks that have been privatized, government continues to hold golden shares. The management and operation of the state-owned banks are still regulated by their owners, which use them to pursue their industrial policies. It is generally perceived that government will stand by their banks and bail them out if short-term liquidity is needed. Deposit insurance companies, however, have been established in many countries to replace blanket insurance with limited guarantees.

The transfer of ownership of domestic private banks to foreign investors has improved their operation from being traditionally intertwined with their business affiliates to a broader customer base. Greater penetration of foreign banks in domestic markets and a gradually increase in the importance of the bond and capital markets have introduced greater competitive pressures into the banking system.

For a number of reasons, credit rating and credit scoring systems and stress testing that demand reliable, up-to-date and comprehensive information are either not yet in existence or are meaningless in the emerging economies. This is because of the limited availability of data and information systems, which is due in part to the weaknesses in the legal and accounting systems, limited access to information, and the availability of implicit guarantees from government.

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