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## Financing Asia's Growth

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### Abstract

Developing Asia has exhibited rapid growth while saddled with relatively backward financial systems. One might conclude that the coexistence of sustained rapid growth and financial underdevelopment in developing Asia implies that an efficient financial sector is not indispensable for economic development. A more considered view would be that developing Asia grew rapidly despite, not because of, financial underdevelopment. With a stronger and better financial system, it might have grown even faster or achieved the same level of growth with lower savings and investment (and hence a lower cost in terms of forgone consumption). Strengthening the region's financial sectors was made more difficult by the global financial crisis, which gave financial development a bad name. However, in developing Asia financial sector development refers less to the introduction of esoteric products than to the more basic task of building efficient banks and capital markets. There is clearly a positive relationship between financial development and growth up to a certain level of financial development. Although it is possible that the relationship turns insignificant or even negative beyond some threshold, developing Asia is well short of that possible turning point.

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Although it has been the fastest-growing region of the world economy for the past few decades, developing Asia is saddled with a relatively backward financial system.<sup>1</sup> In fact, the coexistence of a dynamic real sector and an underdeveloped financial system has been one of the region's most salient structural dichotomies. Financial sector development has long been one of the top priorities on the region's agenda.

Before the Asian financial crisis of 1997–98, large capital inflows, especially foreign currency loans, were intermediated by an inefficient financial system, which channeled them into unproductive investments that did not enhance the economy's capacity to repay the loans. The predictable result was a steady deterioration of the overall quality or efficiency of investments, which eventually led to a sudden reversal of capital flows and a financial crisis that swept across East and Southeast Asia.

Extensive restructuring and reform since the Asian crisis have strengthened and improved the region's financial systems (figures 1 and 2). But with the exception of Hong Kong, China and Singapore, Asian financial systems remain well inside the global finance frontier.

The specifics vary from country to country but are correlated with the level of development. Lower-income Asian countries that are severely underbanked and underfinanced need to quantitatively expand their financial sectors (figures 3 and 4). For the middle-income countries of the region, which have large financial sectors, improving the quality of finance—the competitiveness of the banking system, whether credit is flowing to the most productive sectors of the economy—is a more significant priority.

This relative underdevelopment explains why much of the region's ample pool of savings continues to be recycled through New York and London. Notwithstanding substantial progress since the Asian crisis, financial sector development remains very much a work in progress and a high-priority strategic objective on the region's development agenda.

Ironically, the task of strengthening the region's financial sectors was made more difficult by the global financial crisis of 2008–09, which gave financial development and innovation, and finance more generally, a bad name. To many observers, the global financial crisis was the result of too much financial innovation, which brought plenty of profits to the financial industry but few benefits to the economy at large. A fresh wave of sophisticated financial innovations, such as mortgage-backed securities and collateralized debt obligations, masked financial institutions' reckless search for yield in the housing boom immediately preceding the global crisis. The search was reckless because the underlying transaction—the extension of mortgage loans to borrowers with subprime credit histories—was inherently risky. The global

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1. Developing Asia consists of 45 members of the Asian Development Bank: Armenia, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan in Central Asia; the People's Republic of China, Hong Kong, China, the Republic of Korea, Mongolia, and Taipei, China in East Asia; Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka in South Asia; Brunei Darussalam, Cambodia, Indonesia, the Lao People's Democratic Republic, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam in Southeast Asia; and the Cook Islands, Fiji, Kiribati, the Marshall Islands, the Federated States of Micronesia, Nauru, Papua New Guinea, Palau, Samoa, the Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu in the Pacific.

crisis was a market failure: Too much credit flowed to too many high-risk homebuyers, resulting in too much housing. Mortgage-backed securities, collateralized debt obligations, and other fancy instruments could not reduce the high level of risk associated with massive mortgage lending to subprime borrowers. The extraordinarily clever and complex repackaging, dicing, and splicing of risk merely shifted risk from one part of banks' balance sheets to another—or off their balance sheets altogether—masking the true riskiness of these products.

The global crisis does not weaken the case for financial development in developing Asia in any way, shape, or form; indeed, it strengthens it. It would be incorrect to conclude that financial development and innovation are too dangerous and that the best course of action would therefore be to slow or reverse financial development. It was not innovation per se that precipitated the global crisis but rather the dismal failure of prudential supervision and regulation to keep pace with it. The salutary lesson for developing Asia is that even financially advanced economies are vulnerable to risks arising from esoteric products, reckless lending, and inadequate regulation.

In the context of developing Asia, financial sector development refers to the much more basic task of building sound and efficient banks and capital markets that allocate scarce resources to their most productive uses. Whatever the gains may be from cutting-edge financial sector development, there is clearly a positive and significant relationship between financial development and growth up to a certain level of financial development (Rioja and Valev 2004; Arcand, Berkes, and Panizza 2012; Cecchetti and Kharroubi 2012). Although it is possible that the relationship turns insignificant or even negative beyond some threshold, developing Asia is well short of that possible turning point. The relationship between basic financial sector development and growth is positive.

At first blush one might conclude that the coexistence of sustained rapid growth and financial underdevelopment in developing Asia implies that a sound and efficient financial sector is not indispensable for economic growth and development. A more considered view would be that developing Asia grew rapidly despite, not because of, financial underdevelopment. With a stronger and better financial system, it might have grown even faster or achieved the same level of growth with lower savings and investment (that is, at a lower cost in terms of forgone consumption).

These considerations loom particularly large at a time when growth is moderating and the region is giving higher priority to the quality of growth. The time is therefore opportune to revisit the issue of financial sector development in Asia, especially in the context of reigniting the region's growth momentum.

## FINANCIAL SECTOR DEVELOPMENT AND ECONOMIC GROWTH IN DEVELOPING ASIA

How can one explain the coexistence of a dynamic real sector—East and Southeast Asia are now collectively the factory of the world—and a backward financial system? At very early stages of development, the combination of a high marginal product of capital and clear paths of industrial upgrading (from bicycles to motorcycles to automobiles, for example) means that relatively unsophisticated allocation systems can still generate significant real rates of return. However, as economies develop and approach the technological frontier, the nature of decision making by both corporate managements and their financiers becomes more demanding. The quality of investment and the quality of financial intermediation thus matter, but they may matter less in the initial stages of development than in more mature economies, where the low-hanging fruit of high marginal return projects has been picked. As the economy matures, and the plethora of profitable investment opportunities begins to shrink, the quality of financial intermediation and the quality of investment begin to loom larger in the calculus of economic growth.

In addition to low income level, low capital stock, and hence high marginal returns to capital, another factor mitigated the adverse effect of inefficient financial systems: high saving and investment rates. Relative to other parts of the developing world, developing Asia, especially East and Southeast Asia, saved a lot and invested a lot. Demographics accounts for some of this pattern: The region has benefited enormously from rapid increases in the size of the working-age population and concomitant low dependency ratios, which contributed to saving and dampened the need for social outlays. Generally speaking, the household and corporate sectors of the region were prudent, and by and large Asian governments refrained from the profligacy that characterized the public sectors of many other developing countries. Indeed, the high saving and investment rates were one of the main sources of the region's superior growth performance. Ample savings expand the pool of funds for investment and hence weaken the urgency of high-quality investments. Even if a sizable share of investment is wasted, an economy armed with abundant savings can rapidly accumulate capital and hence productive capacity. In contrast, an economy without ample savings cannot expect to grow rapidly if it wastes scarce savings on unproductive investments. At the same time, there is an intriguing possibility that plentiful savings discourage financial reform and development, because the economy can grow rapidly even in the face of low returns to savings and investment.

Although financial sector development has always mattered for developing Asia's economic growth, the slowdown of growth has added a sense of urgency to the quest for sound and efficient financial systems in the region. Growth has decelerated across the region since the global crisis, partly because of slower growth in the advanced economies (figure 5). Unlike most previous financial crises, the global crisis originated in the advanced countries and hit them harder. As the United States, Europe, and Japan remain

important markets for developing Asia's exporters, especially for final goods, the failure of these markets to fully recover has had adverse implications for the region's export-led growth paradigm.

In addition to a more challenging external environment, the region faces a number of homegrown structural headwinds to growth, such as population aging. The slowdown is also partly the result of the region's past success: As countries grow richer, they eventually grow at a slower pace. In the People's Republic of China (PRC) the slowdown partly reflects a healthy government-engineered transition to more sustainable growth rates. The reallocation of surplus rural labor—that other low-hanging fruit of Asian growth—is also coming to an end in many countries. Whatever the causes, the region's slowdown means it can ill afford an inefficient financial system that wastes or increases the cost of growth.

To some extent, developing Asia is a victim of its own stunning success in the past few decades. In a very short span of time, as a result of sustained rapid growth, it matured from a largely poor region to an increasingly middle-class one. What this means in terms of its growth paradigm is that it is in the midst of a transition from growth based largely on factor accumulation, especially investment, toward growth based on both investment and productivity growth. The balance of the evidence suggests that both factor accumulation and productivity growth contributed to the region's growth in the past. Productivity growth is likely to loom larger in the coming years. To be sure, investment will remain an important source of growth in major Asian economies such as India, Indonesia, and the Philippines, where there is plenty of scope to improve the investment climate and thus raise the investment rate to higher levels. Even in high-investment economies such as the PRC, there is a significant need for investment in the relatively underdeveloped central and western parts of the country. At the same time, however, precisely because past success has radically transformed developing Asia from a capital-deficient to a capital-abundant region, diminishing marginal returns to capital are likely to set in.

The key to sustaining Asia's growth in the postcrisis period lies in improving the productivity of capital, labor, and all other inputs. Transition toward knowledge-based economies will greatly contribute to productivity growth in the region. Technological progress, or the more mundane but no less important improvement in the efficiency of production, is the source of productivity growth. Productivity growth comes from absorbing new knowledge and adapting it to produce new goods or services or produce existing goods or services at a lower cost. Just as diminishing marginal returns to capital set in as the stock of capital expands, the gains from copying advanced foreign technology decline as a country converges toward the global knowledge frontier.

For middle- and high-income Asian countries, transitioning toward a knowledge-based economy means investing in research and development (R&D) to create new knowledge. Some of these countries, including the PRC and the Republic of Korea, already rank among global R&D leaders. For lower-

income countries without the capacity to create new technologies, the transition will be achieved by importing technologies from abroad and adapting them to local conditions.

Knowledge refers not only to revolutionary technology but also to incremental improvements in the nitty-gritty details of production. As both varieties of innovation often, although not always, come from entrepreneurs and new firms—think of Silicon Valley—financial development that provides adequate, reasonably priced credit to these groups can hasten the transition to the knowledge-based economy and spur productivity-led growth in Asia.

## **ADDRESSING FINANCIAL EXCLUSION AND INCOME INEQUALITY**

Within a generation sustained rapid growth in developing Asia increased income levels several fold and lifted average living standards beyond recognition. Growth transformed Asia from a typical Third World backwater to one of the three centers of gravity of the world economy. In addition to producing much better fed, clothed, and housed citizens and catapulting the region to a much more prominent place on the global economic stage, sustained growth has lifted hundreds of millions of Asians out of poverty and given them more humane, dignified, and productive lives. The almost unprecedented reduction of poverty in developing Asia lends a great deal of empirical support to the conventional wisdom that economic growth is the most effective antidote to poverty.

The region now finds itself facing another significant social and economic challenge: rising inequality. In countries that collectively account for more than 80 percent of the region's population, the Gini coefficient, the most widely used measure of inequality, rose between 1990 and 2010 (ADB 2012).<sup>2</sup> These countries include the most populous countries (the PRC, India, Indonesia); high-income countries, such as the Republic of Korea; and low-income countries, such as Bangladesh. As in other parts of the world, growing inequality has fueled social discontent and popular demand for more inclusive growth.

One obvious mechanism for tackling rising inequality is fiscal policy. The government can help promote equity through both taxation (progressive personal income taxes) and expenditure policies (public spending on education and health care) (ADB 2014).

Perhaps less obviously, financial sector development can have an impact on inequality, although the direction of the impact is ambiguous. Financial development and inequality may have an inverted U shape, reducing inequality up to a certain threshold before exacerbating it (Park and Shin forthcoming). As with the impact of financial sector development on growth, however, developing Asia is well short of any such threshold. Financial development in the region can help mitigate inequality.

In many parts of the region, only a small proportion of lower-income groups have access to financial services (figure 6). If the financial system develops in a way that enables a broader segment of the

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2. The Gini coefficient is a number between 0 and 1, where 0 represents perfect equality and 1 represents perfect inequality.

population to gain access to financial services, the poor may be able to borrow to finance their education or health care (among the most important determinants of earning capacity). Doing so can help them accumulate human capital, which in turn will enable them to earn more and close the income gap with the rich. The proequity effect of such borrowing will be larger the wider the initial gap in human capital between rich and poor. In addition to human capital and productive capacity, broadening and deepening the access of the poor to financial services will help them cope better with risks and shocks. This access-broadening dimension of financial development—financial inclusion—contributes to lower inequality.

Financial inclusion is not restricted to the household sector. It extends to the corporate sector: Small and medium enterprises (SMEs) suffer from more restricted access to financial services than large companies (Ayyagari and Beck forthcoming; de la Torre, Martinez Peria, and Schmukler 2010). SMEs are often major sources of innovation, because they are better able to identify niche market needs.

New companies are also often full of new ideas and inject a fresh dose of competition into rigid, stagnant markets. A sound and efficient financial system facilitates entrepreneurship and private enterprise, an indispensable ingredient in a dynamic and healthy market economy.

An especially pernicious form of financial exclusion is the preferential treatment of state-owned companies by state-owned financial institutions. The channeling of resources to state-owned companies on preferential terms starves more dynamic private sector firms of credit. Because the private sector tends to be more efficient, such discrimination deprives the economy of innovation and productivity growth.

## **PREVENTING FINANCIAL INSTABILITY**

Asian economies experienced financial volatility when, in May 2013, US Federal Reserve Chairman Ben Bernanke signaled an intention to taper quantitative easing (figure 7). The episode highlighted the vulnerability of Asian financial systems to monetary policy shocks from the advanced economies in the post-global financial crisis period.

More generally, financial development and innovation can entail substantial risk for financial stability, especially in the absence of concomitant strengthening of regulatory capacity. The global financial crisis highlights the potentially enormous damage to financial stability that poorly regulated and supervised financial development can inflict. At the height of that crisis, credit seized up and the paralyzed financial system failed to perform its core function of channeling resources to the real economy.

The potentially adverse effect of financial development on financial stability has some troubling implications about the costs and benefits of financial development. Financial development fosters economic growth by facilitating investment, the accumulation of capital, innovation, and productivity growth. But it can also contribute to financial instability. In particular, if financial development outpaces

the capacity of prudential supervisors and regulators to keep on top of it, it can create large systemic risks, which sometimes lead to crisis.

Financial crisis can have devastating consequences for the real economy and economic growth. During the global crisis, the financial meltdown fueled widespread fears of a collapse of global output and trade. These fears were fanned by the fact that the crisis originated in the advanced economies and hit those economies disproportionately hard. World output did contract, albeit only marginally; world trade declined more substantially, for the only time in the post–World War II era. Only fiscal stimulus, monetary expansion, and provision of liquidity support throughout the world, by both advanced and developing economies, prevented a repeat of the Great Depression.

Although financial contagion did not spread to developing Asia, where banks had very limited exposure to US subprime assets, the region was not immune to the crisis on the real-economy front. The collapse of global trade, in particular imports by the advanced economies, crimped exports and growth.

The Asian financial crisis of 1997–98 had a devastating impact on aggregate demand and growth in developing Asia. High-flyers such as Indonesia, the Republic of Korea, Malaysia, and Thailand came crashing down to earth in the face of the sudden and massive reversal of foreign capital that had flowed in to capitalize on the region's strong growth prospects. Convulsion of financial markets, most evident in the sharp depreciation of regional currencies, dented business and consumer confidence and spilled over into the real economy. The contraction of output was so severe that it entailed significant unemployment, which, in the absence of what until then had been unnecessary social safety nets, caused social problems.

It is tempting to interpret the Asian crisis as evidence of the destabilizing, growth-destroying effect of financial development or the related but distinct concept of external financial opening. However, it is equally accurate to view the crisis as evidence of the substantial risks of financial underdevelopment. The crisis was not precipitated by capital inflows per se but by the failure of a weak and inefficient financial system to intermediate those flows to productive investments that enhance the economy's ability to produce goods and services and hence repay foreign borrowings.

Even short of a full-blown systemic crisis, financial development can engender financial instability, which adversely affects economic growth. This risk is especially high if financial development is accompanied by financial liberalization and external opening in the absence of strong regulatory oversight. More flexible and hence potentially volatile exchange rates, interest rates, and equity prices may increase uncertainty among businesses and thus reduce investment. gyrations in the prices of financial assets that are detached from fundamentals can destabilize the real economy, as can volatile short-term capital flows.

A financial system that is tightly controlled, directed, and overregulated by the government may seem stable on the surface but may engender instability in other ways. It may, for example, give rise to a large shadow banking sector that serves the financial needs of companies and households the state-directed

financial system fails to serve. Shadow banking entails some benefits, but it is, by definition, beyond the realm of prudential supervision and regulation and hence less transparent and riskier than the formal financial sector. Furthermore, financial repression may distort incentives across institutions and projects and contribute to misallocation of investment, specifically overinvestment in low-return projects, which may erupt into crisis when the government eventually embarks upon financial liberalization.

More fundamentally, even if one accepts the premise that financial repression can promote financial stability, it comes at a large cost in terms of growth. A state-dominated financial system channels resources to state-owned firms at the expense of private sector firms even though they tend to be more efficient and innovative. More generally, state-directed credit allocates scarce credit to activities, firms, and industries preferred by the government rather than the market. Whether financial institutions are state-owned or private but subject to extensive government guidance, a state-dominated financial system severely distorts the allocation of resources and hampers innovation.

Ideally, financial development should proceed in a way that minimizes the risks to financial stability while maximizing the benefits for economic growth. Strong and effective prudential regulation is key in this regard. Such regulation is an art rather than a science, as it should preempt financial instability without choking off growth-conducive financial innovation. In some cases, innovative measures such as macroprudential policies and bank stress tests can support a sound regulatory framework.

## **CONCLUDING OBSERVATIONS**

Financial sector development in developing Asia is hardly a new issue: The gap between the region's dynamic real economy and its relatively backward financial sector has existed for years. Now is an opportune time to revisit Asia's financial development, for a number of reasons. Above all, the region's growth has slowed since the global crisis, precipitated by a less benign external environment; internal structural challenges, such as population aging; and the maturing of much of the region into middle-income status. The slowdown amplifies the cost of financial underdevelopment, especially in terms of forgone growth: Wasted growth is much more costly when the economy is growing at 5 percent a year than 10 percent a year. Further reinforcing the urgency of financial development is the evolving shift in the region's growth paradigm from one based primarily on investment to one based on both investment and productivity growth. The vital role of innovation and knowledge in Asia's productivity growth and hence economic growth makes it critical that its financial system be able to channel more funds at lower cost to entrepreneurs and new firms in the future.

It is possible that financial development promotes economic growth only up to a point, that beyond a high level of financial development further development may lead to financial instability, even financial crisis, hurting economic growth. A classic example of such a possibility is the global financial crisis of

2008–09, which caused financial paralysis and nearly brought down the world economy. With the possible exceptions of the financial centers of Hong Kong, China and Singapore, however, developing Asia is at a significantly lower level of financial development than the level at which too much finance becomes a concern. Financial development in developing Asia requires building up sound and efficient banks, equity markets, and bond markets that intermediate savings into productive investments while mitigating their vulnerability to shocks.

To a large extent, the evolution in the quality of the region's growth requires evolution in the quality of its financial system. In the past the overriding priority of growth lay in growing as rapidly as possible. This priority made sense in light of the region's very low income level and grinding poverty. However, developing Asia has now become an increasingly middle-income region, where the quality of growth matters as much as the quantity of growth. A key component of higher-quality growth is more inclusive growth. Financial inclusion facilitates inclusive growth, by broadening the reach of financial services to wider swathes of the population and economy, including poorer households, smaller firms, and new firms. Some elements of financial inclusion (such as borrowing by the poor for education) have a direct positive effect on growth. Others (such as borrowing to finance consumption in the face of a natural disaster) have a less direct effect.

A sound and efficient financial system has enormous benefits for economic growth and development. Those benefits become even larger if financial development is complemented with structural and policy reforms in other areas. For example, reforms that improve the business climate (by, for example, reducing red tape and strengthening infrastructure) increase the benefits of financial development, which unlocks the flow of credit to new firms and entrepreneurs. Education reform that improves the quality of public schools increases the effect of financial inclusion, which improves the ability of the poor to finance their education. Better public health care also amplifies the benefits of financial inclusion. In short, financial development and inclusion work best in a policy environment that is conducive to growth and development.

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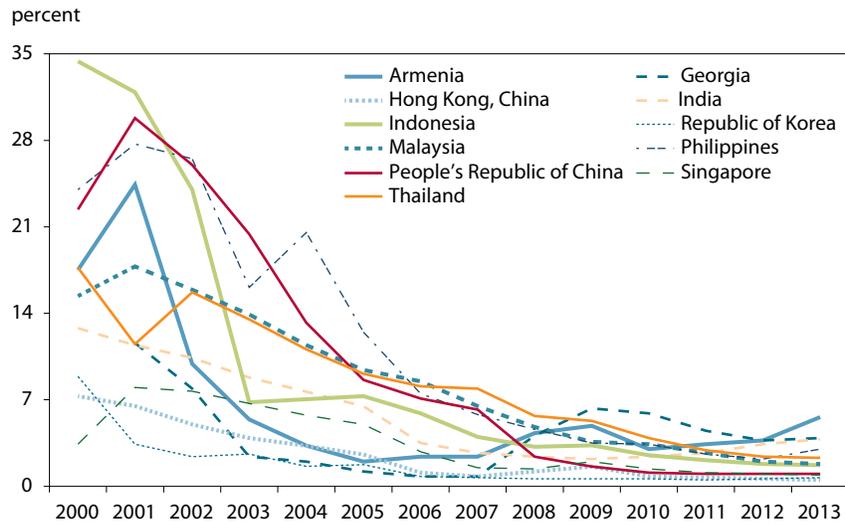
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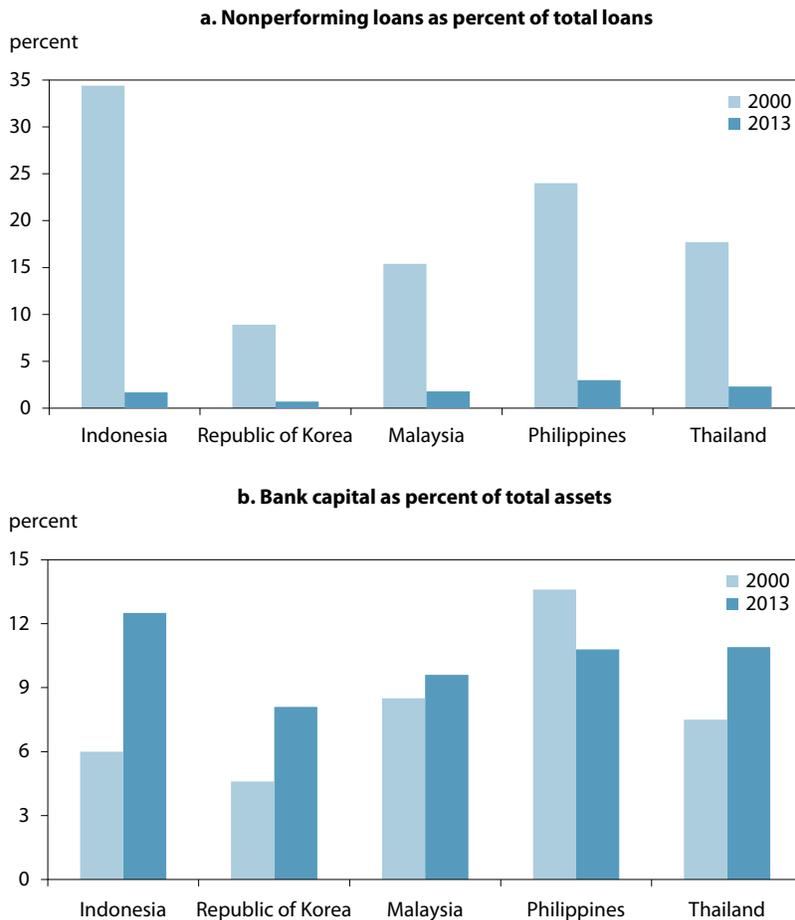
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**Figure 1 Nonperforming loans as a percent of total loans in selected Asian economies, 2000–13**



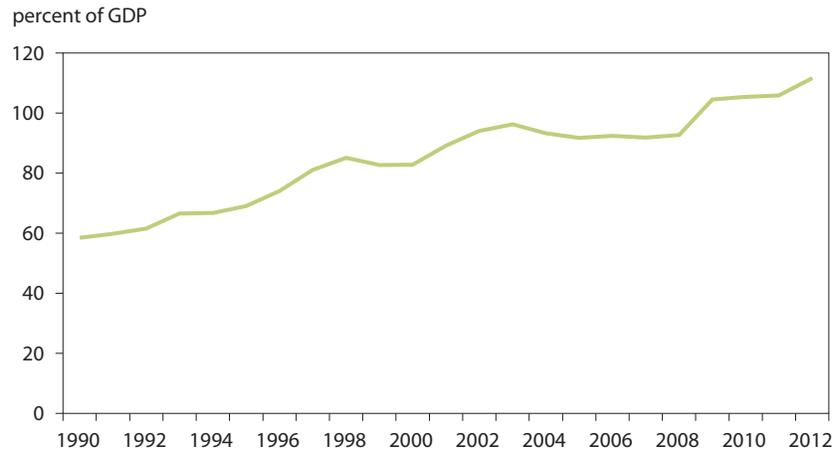
Source: World Bank, *World Development Indicators* online database (accessed on September 15, 2014).

**Figure 2 Financial sector performance in Asian crisis countries, 2000 and 2013**



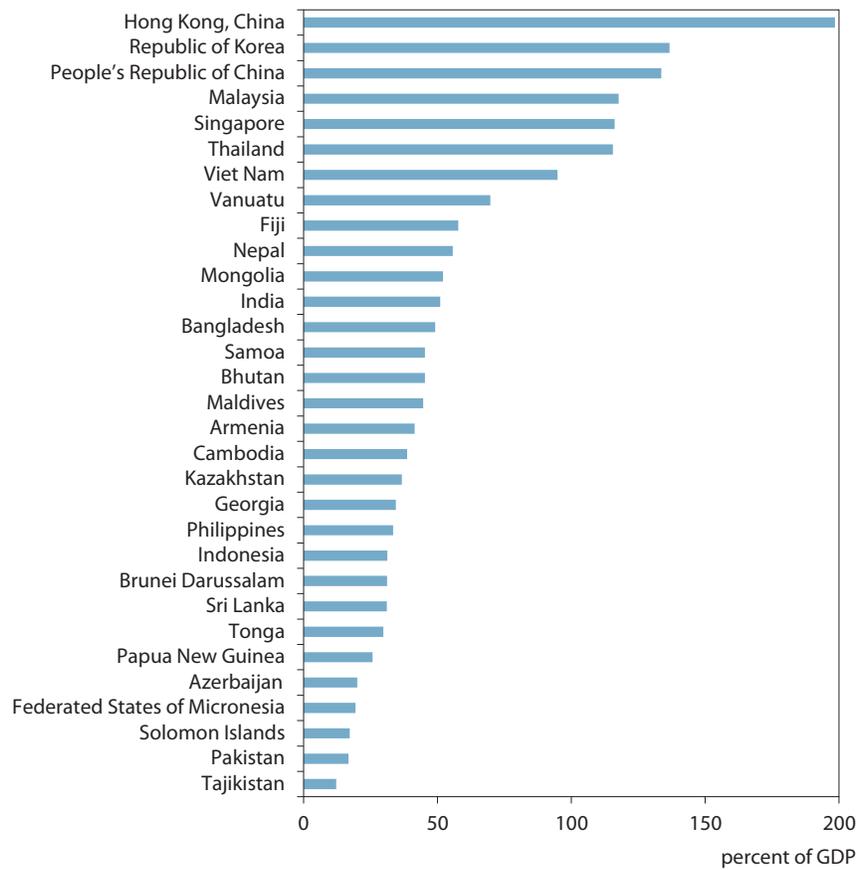
Source: World Bank, *World Development Indicators* online database (accessed on September 15, 2014).

**Figure 3 Private credit as percent of GDP in developing Asia, 1990–2012**



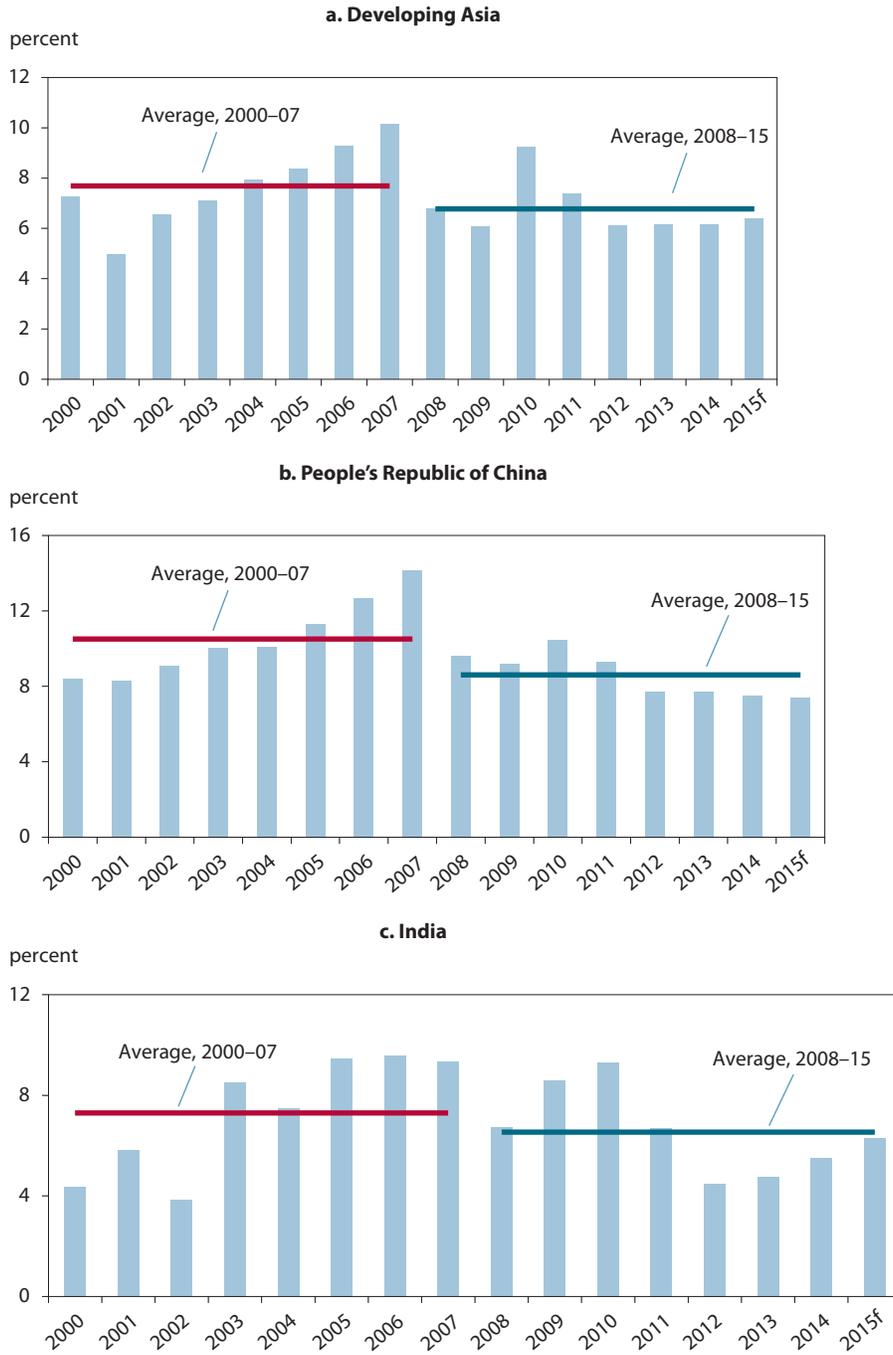
Source: Asian Development Bank estimates based on data from the World Bank, *World Development Indicators* online database (accessed on September 15, 2014).

**Figure 4 Private credit as share of GDP in selected developing Asian economies, 2012**



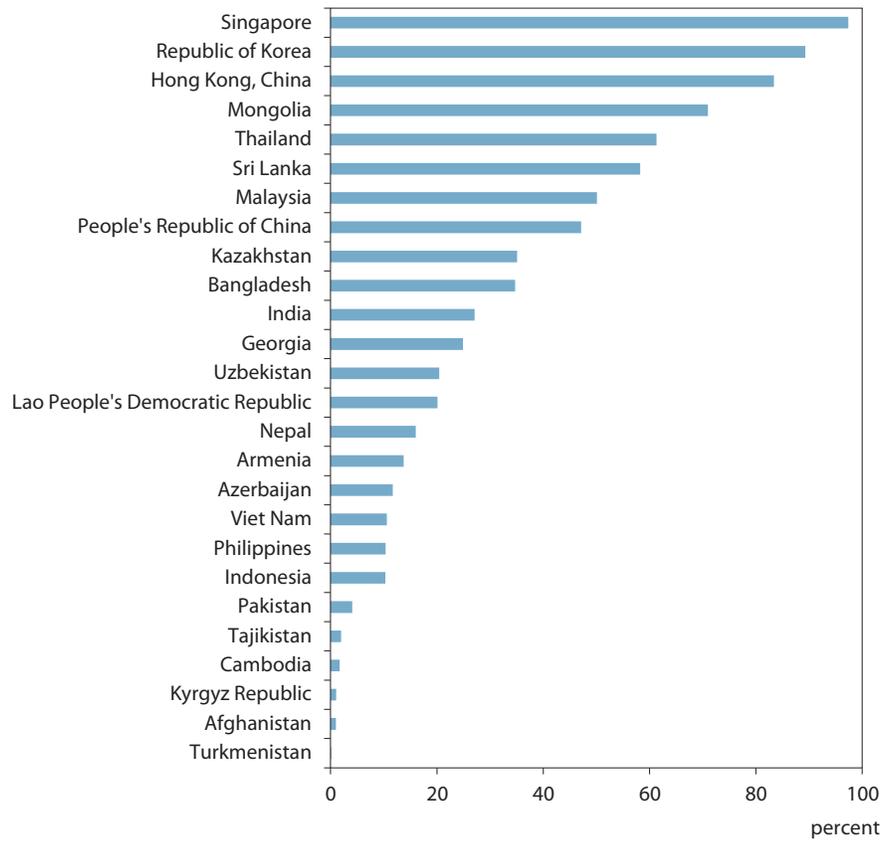
Source: World Bank, *World Development Indicators* online database (accessed on September 15, 2014).

**Figure 5 GDP growth rates in developing Asia, People's Republic of China, and India, 2000–2015**



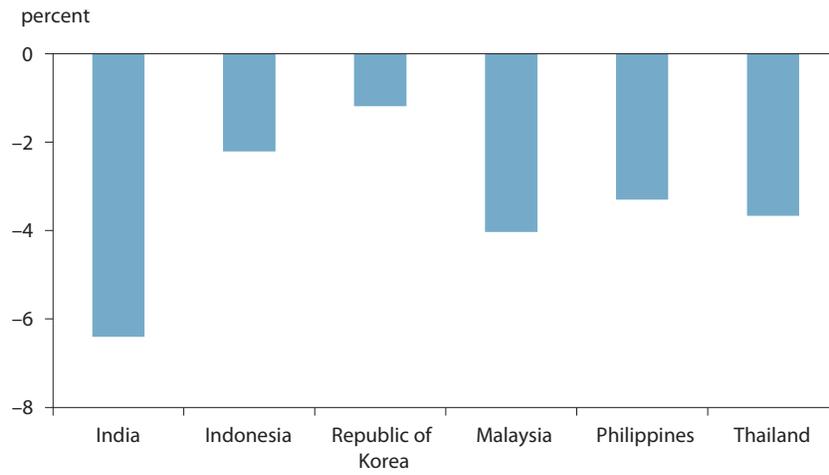
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 Source: Asian Development Bank, *Asian Development Outlook* database.

**Figure 6 Percentage of adults in bottom 40 percent of the income distribution with an account at a formal financial institution, 2011**



Source: Demirgüç-Kunt and Klapper (2013).

**Figure 7** Changes in nominal exchange rates in selected countries in developing Asia, May 23–June 30, 2013



Note: Decline means depreciation

Source: Bloomberg (accessed on September 22, 2014).