

## **Ben S Bernanke: Asia and the global financial crisis**

Speech by Mr Ben S Bernanke, Chairman of the Board of Governors of the US Federal Reserve System, at the Federal Reserve Bank of San Francisco's Conference on Asia and the Global Financial Crisis, Santa Barbara, California, 19 October 2009.

\* \* \*

The rise of the Asian economies since World War II has been one of the great success stories in the history of economic development. Japan's transition to an economic powerhouse was followed by the rapid ascent of the Asian tigers, and subsequently by China taking a prominent place on the world economic stage.<sup>1</sup> Since the beginning of this decade, Asia has accounted for more than one-third of the world's economic growth, raising its share of global gross domestic product (GDP) from 28 percent to 32 percent.<sup>2</sup> Importantly, its economic success has resulted in large-scale reductions in poverty and substantial improvements in the standards of living of hundreds of millions of people. China and India, which together account for almost 40 percent of the world's population, have seen real per capita incomes rise more than 10-fold and 3-fold, respectively, since 1980. As would be expected given the increasing size and sophistication of their economies, the nations of the region have also begun to exert a substantial influence on global economic developments and on international governance in the economic and financial spheres.

It is widely agreed that a key source of Asia's rapid advancement has been the openness of countries in the region to global trade and finance. Notwithstanding this consensus, the considerable progress of these countries in developing domestic institutions, policies, and industrial capacity – together with their strong growth in the initial phase of the ongoing global financial crisis – led some to speculate that the Asian economies had "decoupled" from the advanced economies of North America and Europe. Of course, in hindsight, given the magnitude of the shocks that have struck these advanced economies over the past two years, as well as their strong economic and financial links to Asia, it should not have been surprising that Asia was ultimately hit quite hard by the global downturn, even though the origins of the turmoil were elsewhere.

As a prelude to the papers and discussions to follow, I will provide a brief overview of the Asian experience during the global financial crisis. I will highlight the diversity of experiences, both within Asia and between Asia and other regions, and draw some inferences about the different channels through which the effects of the financial crisis were transmitted around the world. I will discuss Asia's policy response to the economic and financial consequences of the crisis. Finally, I will focus on medium-term challenges. For both Asia and the United States, perhaps the greatest medium-term challenge is to achieve more balanced growth and, in the process, to further reduce global imbalances.

### **Asia's experience in the crisis**

During the years following the financial crisis of the late 1990s, many emerging market economies, in Asia and elsewhere, took advantage of relatively good global economic conditions to strengthen their economic and financial fundamentals; they improved their fiscal and external debt positions, built foreign exchange reserves, and reformed their banking sectors. Hence, at the onset of the financial turmoil in the summer of 2007, the Asian economies appeared well-positioned to avoid its worst effects. Although global financial

---

<sup>1</sup> The term "Asian tigers" refers to the economies of Hong Kong, Singapore, South Korea, and Taiwan.

<sup>2</sup> This estimate is based on purchasing power parity measures of GDP.

markets, including Asian markets, deteriorated sharply following the start of the crisis, Asia's recovered swiftly, with equity prices reaching new highs early in the fourth quarter of that year. Moreover, economic activity in the region continued to expand.

However, toward the end of 2007, at about the same time that the United States entered a recession, the headwinds facing the Asian economies appeared to strengthen. Asian equity markets began to fall again – they were to underperform global markets throughout much of 2008 – and other signs of financial stress, such as widening credit spreads, appeared as well. By the second quarter of 2008, many of the region's economies were slowing, and growth in Hong Kong, Singapore, and Taiwan – small, open economies particularly sensitive to shifts in global conditions – had ground to a halt.

In September and October 2008, as you know, the global financial crisis intensified dramatically. Concerted international action prevented a global financial meltdown, but the effects of the crisis on asset prices, credit availability, and consumer and business confidence resulted in sharp declines in demand and production worldwide. Reflecting this worsening economic climate, Asian GDP growth slowed further in the second half of 2008. For the region as a whole, the economic contraction in the fourth quarter of 2008 was pronounced, with activity falling at an annual rate of nearly 7 percent.<sup>3</sup> The fourth-quarter declines were especially dramatic in Taiwan and Thailand (more than 20 percent at an annual rate) and in South Korea and Singapore (more than 15 percent at an annual rate). Among the major Asian economies, only those of China, India, and Indonesia did not contract during the crisis.

Early this year, with many of the Asian economies in freefall, a quick recovery seemed difficult to imagine, but recent data from the region suggest that a strong rebound is, in fact, under way. Although the regional economy continued to contract in the first months of 2009, it expanded at an impressive 9 percent annual rate in the second quarter, with annualized growth rates well into double digits in China, Hong Kong, Korea, Malaysia, Singapore, and Taiwan.<sup>4</sup> At this point, while risks to the economic outlook certainly remain, Asia appears to be leading the global recovery.

## **Diversity of experiences**

This brief review of Asia's experience during the crisis raises a number of important questions: Through what channels were the effects of the financial crisis transmitted across the globe? In particular, why was Asia, whose financial systems largely escaped the serious credit problems that erupted in the United States and Europe, hit so hard by the global recession? What enabled the Asian economies to bounce back so sharply more recently? And why did some countries – around the world and within Asia – suffer much deeper contractions than others? Some light can be shed on these questions by examining the diversity of experiences among both Asian and non-Asian economies during the downturn.

### ***Transmission channels: trade and finance***

The crisis that began in the West affected Asia through various transmission channels, whose relative importance depended in some degree on the particular characteristics of each economy. However, for virtually all of the Asian economies, international trade appears to have been a critical channel. Exhibit 1 shows the course of global merchandise exports since

---

<sup>3</sup> The Asian region here refers to Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, New Zealand, Pakistan, the Philippines, Singapore, South Korea, Taiwan, Thailand, and Vietnam. The economic growth calculation weights these economies by GDP at market exchange rates.

<sup>4</sup> These growth rates are measured on a quarter-to-quarter basis at an annual rate. China's quarterly growth rate is estimated from published four-quarter growth rates.

the beginning of this decade. As the exhibit shows, after a period of strong growth, international trade plunged about 20 percent in real terms from its pre-crisis peak to its trough in early 2009 (the dashed red line), and about 35 percent in U.S. dollar terms (the solid blue line).<sup>5</sup> The trade-dependent economies of Asia could certainly not be immune to the effects of such a decline.

Why did global trade fall so abruptly? The severe recession in the advanced economies greatly restrained aggregate spending, including spending on imports, but the decline in international trade appears surprisingly large even when the depth of the recession in the advanced countries is taken into account. One possible explanation for the outsized decline in trade volumes lies in the extreme uncertainty that prevailed in the darkest months of the crisis. Consumers and businesses knew last fall that economic conditions were poor, but, in light of the severity and the global nature of the financial crisis, many feared outcomes that might be much worse. Perhaps to a greater extent than they might have otherwise, households and firms put off purchases of big-ticket items, such as consumer durables and investment goods. Durable goods figure prominently in trade and manufacturing, so these sectors may have been particularly vulnerable to the elevated uncertainty and weakened confidence that prevailed during the height of the crisis.

Credit conditions also likely affected the volume of trade, through several channels. The turmoil in credit markets doubtless exacerbated the sharp decline in demand for durable goods, and thus in trade volumes, as purchases of durable goods typically involve some extension of credit. Manufacturing production, a major component of trade flows, may have been cut back more sharply than would otherwise have been the case as producers, concerned about credit availability, attempted to preserve working capital. Finally, although it is difficult to assess the size of the effect, problems in obtaining trade finance may have also impeded trade for a time.

With trade falling sharply around the world, economies particularly dependent on trade were hit especially hard. Exhibit 2 illustrates this point for a group of Asian and non-Asian economies. The vertical axis of the figure shows real GDP growth, measured relative to trend, during the most severe stage of the downturn, and the horizontal axis shows a measure of openness to trade.<sup>6</sup> Combinations of growth and openness observed in various economies are indicated by red squares for a number of Asian countries and by black dots for several non-Asian countries. The exhibit shows that countries most open to trade (those located further to the right in the figure) suffered, on average, the greatest declines in growth relative to trend. The most extreme cases are Hong Kong and Singapore, shown to the far right; the economies of Korea, Taiwan, Thailand, and Malaysia, which are also very open, suffered significant growth deficits as well.

Indeed, the GDP contractions in some Asian economies during that period rivaled those during the Asian financial crisis of the late 1990s. Relative to pre-crisis trend, the six Asian economies just mentioned plus Japan experienced declines in real GDP growth of about 13 to 20 percentage points at an annual rate during the last quarter of 2008 and the first quarter of 2009. Growth fell somewhat less severely in the Philippines and only moderately in Australia and New Zealand. As noted earlier, real GDP growth remained positive throughout

---

<sup>5</sup> The nominal data are the sum of the total merchandise exports of 44 economies, including the United States, expressed in U.S. dollars. The real data are calculated by deflating these dollar-value nominal exports by export price indexes constructed from local-currency deflators drawn from country sources and dollar exchange rates.

<sup>6</sup> Specifically, the vertical axis shows each country's deviation of average GDP growth from trend growth (at an annual rate) over 2008:Q4 and 2009:Q1. Trend growth is defined as the average annualized growth rate during 2006 and 2007 of historical GDP data smoothed using the Hodrick-Prescott filter. The horizontal axis shows each country's trade openness as measured by the sum of its imports and exports as a fraction of its nominal GDP in 2007.

the crisis in China, India, and Indonesia, but, as exhibit 2 shows, even those fast-growing economies experienced noticeable declines in growth relative to their earlier trends. The exhibit shows that a similar relationship between growth and openness to trade holds for non-Asian countries; for example, more trade-dependent nations like Germany saw sharper declines in output during the crisis than other less-open economies.

Variations across countries in trade openness do not fully explain the diversity of growth experiences during the downturn, suggesting that other factors were also at work. Notably, although financial institutions in emerging market economies were not, for the most part, directly affected by the collapse of the market for structured credit products and other asset-backed securities, financial stress nevertheless affected these countries. As international investors' appetite for risk evaporated, the flow of capital shifted away from countries that had historically been viewed as more vulnerable, including some emerging Asian and Latin American economies, even though many of these countries appeared to be much better positioned to weather an economic crisis than in the past. Moreover, regardless of perceived risks, financial institutions pulled money from risky assets in advanced and emerging markets alike in an effort to strengthen their balance sheets.

Following the reversal in capital flows engendered by the crisis, strains in banking appeared across Asia, leading to severe credit tightening in some countries. Fears of counterparty risk disrupted interbank lending in many countries, intensifying already existing funding difficulties. The drying up of the wholesale funding market hurt Korea's banking system in particular; prior to the crisis, it had accounted for about one-third of Korean bank funding. In Japan, some banks' exposures to equity markets damaged their capital positions. With Asian banks experiencing dollar funding pressures similar to those arising elsewhere in the world, the Federal Reserve established 5 of its 14 liquidity swap lines with central banks in the region: Australia, Japan, Korea, New Zealand, and Singapore. The reversal in capital flows also caused rapid exchange rate depreciation in some countries, particularly Korea, Indonesia, and Malaysia. The Korean won depreciated 40 percent against the dollar from the beginning of 2008 through its trough in March of this year, and it has only partially recovered. Over the same period, the Indonesian rupiah fell 22 percent against the dollar.

Exhibit 3 shows the relationship between rates of GDP growth during the downturn, relative to trend, and financial openness, as measured by the sum of each country's international assets and liabilities relative to its GDP.<sup>7</sup> The exhibit shows that, for both Asian and non-Asian economies, financial openness was associated with greater declines in output, though the linkage appears somewhat less tight than that for trade.<sup>8</sup> Again, the most extreme cases are Singapore and especially Hong Kong (which is not shown, as it is more than twice as open as even Singapore). Taiwan is another example of a financially open Asian economy that experienced a particularly severe downturn. By the same token, China, India, and Indonesia, the three Asian countries in which output expanded throughout the crisis, are among the least financially open.

Trade and financial channels influenced other emerging markets as well, such as those in Latin America and Eastern Europe. Many of these economies also contracted sharply, but thus far they have recovered more slowly than economies in Asia. In the case of Latin America, closer links to the U.S. economy (especially in the case of Mexico) and greater dependence on commodity exports (whose prices declined during the most intense phase of the crisis) were additional sources of weakness. In Eastern Europe, preexisting

---

<sup>7</sup> A country's international assets are claims on foreigners by its residents, and liabilities are foreigners' claims on the country's residents. Data on these claims are from Haver and the U.S. Bureau of Economic Analysis.

<sup>8</sup> Whether the relationship shown in Exhibit 3 is causal is not entirely clear, however, as economies that are more exposed to the global financial system also tend to be those economies most open to trade, as can be seen by comparing Exhibit 3 to Exhibit 2.

macroeconomic imbalances and structural weaknesses likely magnified the effects of the adverse global shocks.

It is important not to take the wrong lesson from the finding that more open economies were more severely affected by the global recession. Although tighter integration with the global economy naturally increases vulnerability to global economic shocks, considerable evidence suggests that openness also promotes stronger economic growth over the longer term. Protectionism and the erecting of barriers to capital flows should thus be strongly resisted. Instead, as I will discuss, striking a reasonable balance between trade and growth in domestic demand is the best strategy for driving economic expansion.

### ***Policy responses***

By and large, countries in Asia came into the crisis with fairly strong macroeconomic fundamentals, including low inflation and favorable fiscal and current account positions. Good fundamentals, in turn, provided scope for strong policy responses in many countries. China, Japan, Korea, and Singapore were among those employing relatively aggressive policy strategies; in particular, China undertook a sizable fiscal program, supplemented by accommodative monetary and bank lending policies. The stimulus packages in China and elsewhere have lifted domestic demand throughout the region, boosting intraregional trade.

Not all Asian nations responded so aggressively to the crisis. Some countries with weaker fiscal positions no doubt felt constrained in the extent of fiscal stimulus they provided. Similarly, monetary policies were likely influenced by differences in inflation performance. On the one hand, countries experiencing low inflation or deflation, such as China, Japan, and Thailand, were able to implement expansionary monetary policies without concerns about increasing inflationary pressures. Indeed, Japan used unconventional monetary easing in part to avoid deeper deflation. On the other hand, inflation concerns were more pressing for Indonesia, the Philippines, and Korea, with the result that their monetary policy responses may have been more muted than would otherwise have been the case. The national variation in policy responses likely also reflected differences in the severity of the crisis across countries.

Generally speaking, the Asian response to the crisis appears thus far to have been effective. Importantly, as I have suggested, the Asian recovery to date has been in significant part the result of growth in domestic demand, supported by fiscal and monetary policies, rather than of growth in demand from trading partners outside the region. To illustrate the point, for each of the countries in the region, exhibit 4 shows industrial production (the solid blue bars) and exports (the striped red bars) measured relative to the pre-crisis peak.<sup>9</sup> You can see that the blue bars are generally taller than the red bars, indicating that, except for New Zealand and Hong Kong, industrial production has rebounded by more than exports. Indeed, industrial production in China, India, and Indonesia has already reached new highs, and it is within about 5 percent of its previous peak in Australia and Korea. We would expect to see this pattern if growth in domestic demand, rather than growth in exports, was the predominant driver of increases in domestic production.<sup>10</sup> The revival of demand in Asia has, in turn, aided global economic growth.

Despite the initial successes of Asian economic policies, risks remain. As in the advanced economies, unwinding the stimulative policies introduced during the crisis will require careful judgment. Policymakers will have to balance the risks of withdrawing policy support too early, which might cut short a nascent recovery, against the risks of leaving expansionary policies

---

<sup>9</sup> The data are quarterly through the second quarter of 2009. Exports are measured in U.S. dollars.

<sup>10</sup> In principle, some rebuilding of inventories for export could also be boosting production, but such inventory data for the region that are available do not strongly support this view.

in place for too long, which could overheat the economy or worsen longer-term fiscal imbalances. In Asia, as in the rest of the world, the provision of adequate short-term stimulus must not be allowed to detract from longer-term goals, such as the amelioration of excessive global imbalances or ongoing structural reforms to increase productivity and support balanced and sustainable growth.

### **Lessons from crises and medium-term challenges**

For now, Asian countries look to be weathering the current storm. In part, their successful responses reflect the lessons learned during the Asian financial crisis of the 1990s, including the need for sound macroeconomic fundamentals.

One crucial lesson from both that crisis and the recent one is that financial institutions must be carefully regulated, transparent, and sufficiently well capitalized and liquid to withstand large shocks. In part because of the reforms put in place after the crisis of the 1990s, along with improved macroeconomic policies, Asian banking systems were better positioned to handle the more recent turmoil. With the increased prominence of the Group of Twenty (G-20) as a forum for discussing the global responses to the crisis, emerging market economies, including those in Asia, will play a larger role in the remaking of the international financial system and financial regulation.

Another set of lessons that Asian economies took from the crisis of the 1990s may be more problematic. Because strong export markets helped Asia recover from that crisis, and because many countries in the region were badly hurt by sharp reversals in capital flows, the crisis strengthened Asia's commitment to export-led growth, backed up with large current account surpluses and mounting foreign exchange reserves. In many respects, that model has served Asia well, contributing to the rapid growth rates in the region over the past decade. In fact, it bears repeating that evidence from the world over shows trade openness to be an important source of economic growth. However, too great a reliance on external demand can also pose problems. In particular, trade surpluses achieved through policies that artificially enhance incentives for domestic saving and the production of export goods distort the mix of domestic industries and the allocation of resources, resulting in an economy that is less able to meet the needs of its own citizens in the longer term.

To achieve more balanced and durable economic growth and to reduce the risks of financial instability, we must avoid ever-increasing and unsustainable imbalances in trade and capital flows. External imbalances have already narrowed substantially as a consequence of the crisis, as reduced income and wealth and tighter credit have led households in the United States and other advanced industrial countries to save more and spend less, including on imported goods. Together with lower oil prices and reduced business investment, these changes in behavior have lowered the U.S. current account deficit from about 5 percent of GDP in 2008 to less than 3 percent in the second quarter of this year. Reflecting in part reduced import demand from the United States, China's current account surplus fell from about 10 percent of GDP in the first half of 2008 to about 6-1/2 percent of GDP in the first half of this year.

As the global economy recovers and trade volumes rebound, however, global imbalances may reassert themselves. As national leaders have emphasized in recent meetings of the G-20, policymakers around the world must guard against such an outcome. We understand, at least in principle, how to do this. The United States must increase its national saving rate. Although we should deploy, as best we can, tools to increase private saving, the most effective way to accomplish this goal is by establishing a sustainable fiscal trajectory, anchored by a clear commitment to substantially reduce federal deficits over time. For their part, to achieve balanced and sustainable growth, the authorities in surplus countries, including most Asian economies, must act to narrow the gap between saving and investment and to raise domestic demand. In large part, such actions should focus on boosting consumption. Admittedly, just as increasing private saving in the United States is

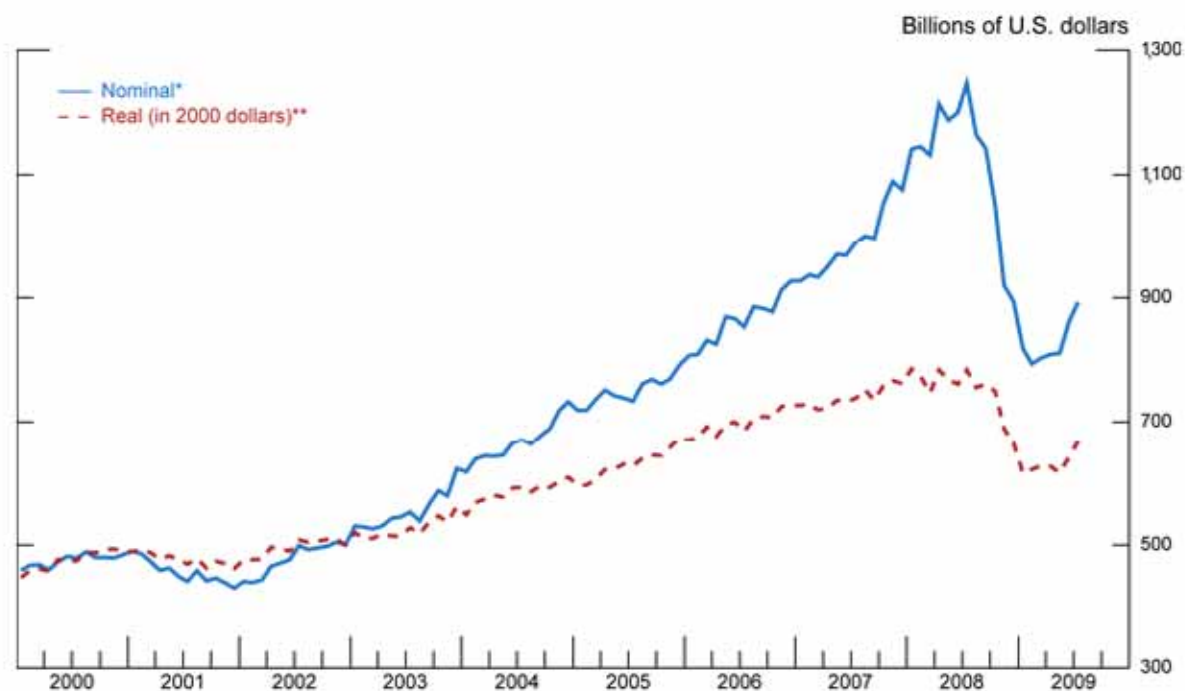
challenging, promoting consumption in a high-saving country is not necessarily straightforward. One potentially effective strategy is to reduce households' precautionary motive for saving by strengthening pension systems and increasing government spending on health care and education. Of course, such measures are likely to improve welfare and productivity as well as to contribute to more balanced, robust, and sustainable economic growth.

## Conclusion

The United States has benefited significantly from Asia's rapid development and integration into the global economy, and the payoffs to the Asian economies from global economic integration have been substantial as well. Indeed, the financial crisis has starkly demonstrated the extent to which the fortunes of the United States, Asia, and the rest of the global economy are intertwined. These powerful economic linkages, as well as the importance of both the United States and Asia in the global economy, underscore the need for consultation and cooperation in addressing common issues and concerns. Our shared stakes in the prospects of the global economy bring with them a heightened responsibility to work together to maintain those prospects. I am optimistic that the United States and Asia will rise to the challenge and address in a mutually beneficial fashion the range of issues confronting the global economy. Conferences such as this one, which bring together policymakers and scholars from both sides of the Pacific, will further the cause of this cooperation.

Exhibit 1

### Global Merchandise Exports



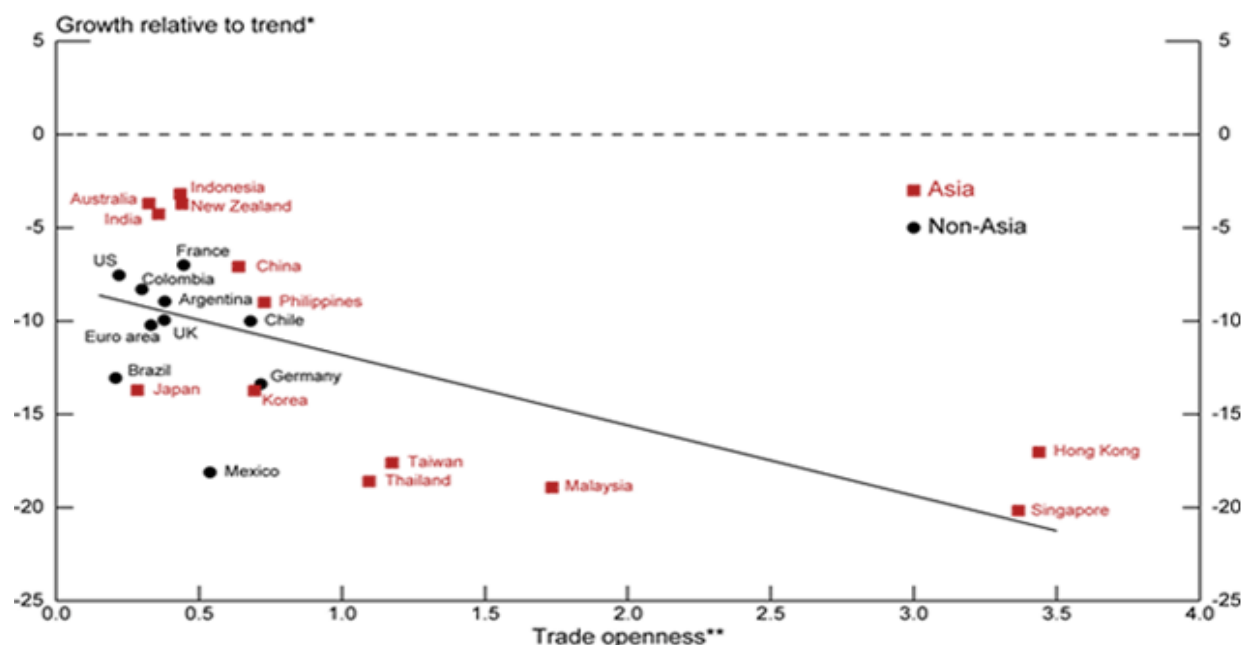
\*The nominal data are the sum of the total merchandise exports of 44 economies, including the United States, expressed in U.S. dollars.

\*\*The real data are calculated by deflating dollar-value nominal exports by export price indexes constructed from local-currency deflators drawn from country sources and dollar exchange rates.

Source: CEIC, Haver, and staff estimates.

Exhibit 2

### Trade Openness and GDP Growth (2008Q4 - 2009Q1)



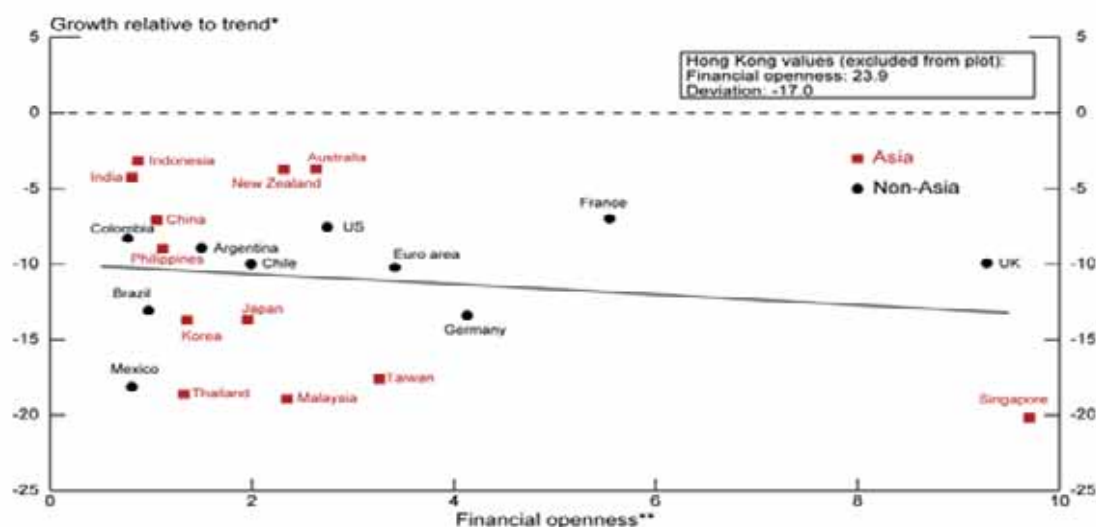
\*Growth relative to trend is the percentage point difference between the realized rate of growth during 2008Q4 and 2009Q1, measured at an annual rate, and trend growth. Trend growth is the average annualized growth rate during 2006 and 2007 of smoothed gross domestic product (GDP) using the Hodrick-Prescott filter.

\*\* $(\text{Exports} + \text{Imports}) / \text{GDP}$  in 2007.

Source: CEIC, Haver, and staff estimates.

Exhibit 3

### Financial Openness and GDP Growth (2008Q4 - 2009Q1)



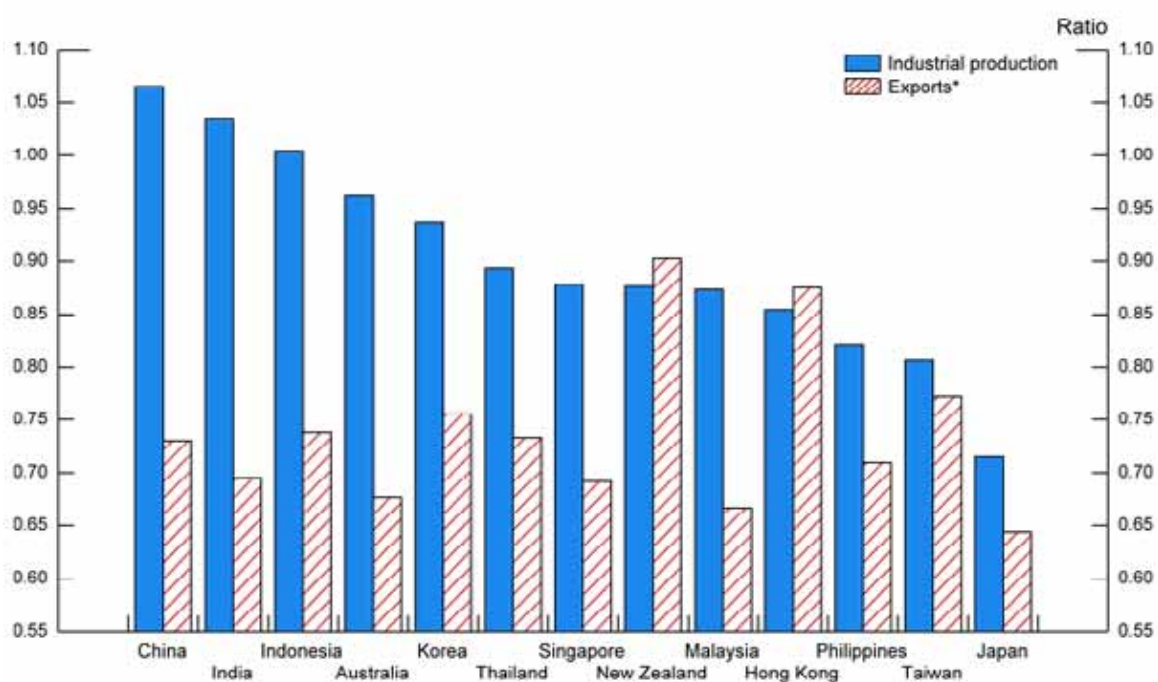
\*Growth relative to trend is the percentage point difference between the realized rate of growth during 2008Q4 and 2009Q1, measured at an annual rate, and trend growth. Trend growth is the average annualized growth rate during 2006 and 2007 of smoothed gross domestic product (GDP) using the Hodrick-Prescott filter.

\*\* $(\text{International Assets} + \text{Liabilities}) / \text{GDP}$  in 2007.

Source: CEIC, Haver, and staff estimates. International investment position data are from Haver and the U.S. Bureau of Economic Analysis.

Exhibit 4

### Asian Industrial Production and Exports Relative to Pre-Crisis Peak



\*Exports are measured in U.S. dollars. Industrial production and export data are through the second quarter.  
Source: CEIC, Haver, and staff estimates.